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***What Does Regional Trade in South Asia Reveal about Future
Trade Integration?***

Some Empirical Evidence

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Abstract

In 1995, the seven South Asian countries—Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka—initiated a multilateral framework for region-wide integration under the South Asian Preferential Trade Agreement (SAPTA). In a recent initiative, members agreed that SAPTA would begin the transformation into a South Asian Free Trade Area (SAFTA) by the beginning of 2006, with full implementation completed between 2009 and 2013. The impetus toward regional preferential trading arrangements and greater regional economic integration raises many important issues, both for the South Asian region as a whole and for the individual countries.

The paper utilizes the “natural trading partners” hypothesis as the empirical criterion to assess the potential success of a South Asian trading bloc. Using various definitions of the “natural trading partner” hypothesis—based on “trade volume”, “geographic proximity” and the “complementarity” approaches—this study demonstrates that the South Asian countries can be characterized only moderately as “natural trading partners”. This characterization is, however, largely a consequence of previous impediments to trade among regional members. This study further demonstrates through additional statistical measures—including “revealed comparative advantage” indices, “trade concentration”, and “trade competition” profiles—that the trade structures that have evolved among the South Asian countries may not facilitate a rapid increase in intra-regional trade.

There is evidence, however, that previous unilateral trade liberalization efforts in the South Asian countries have already had a positive impact in boosting both intra- and extra-regional trade. Continuing the process of unilateral liberalization, in parallel with regional integration, would aid the South Asian countries to continue to diversify their still narrow export bases and potentially evolve new comparative advantages and complementarities that could facilitate the successful implementation of SAFTA.

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List of Acronyms

BOP	Balance of Payments
RCA	International Revealed Comparative Advantage
LLDC	Least Developed Country
MFN	Most Favored Nation
NIC	Newly Industrialized Countries
NTB	Non-Tariff Barriers
QR	Quantitative Restriction
REER	Real Effective Exchange Rate
ROO	Rules of Origin
RTA	Regional Trade Agreement
SACs	South Asian Countries
SAARC	South Asian Association for Regional Cooperation
SAPTA	South Asian Preferential Trade Agreement
SAFTA	South Asian Free Trade Agreement
TII	Trade Intensity Index
WTO	World Trade Organization

Prologue

South Asia is home to over 20 percent of the world's population but accounts for only 1.5 percent of world GDP and just over 1 percent of world trade. The region was one of the most protected until the late 1980s due to the prolonged use of import-substitution policies backed by restrictive trade and industrial regimes. However, since 1990, South Asia has moved in line with changes in world economic trends. It has made much progress in deregulation, and liberalization has helped to increase the region's integration with the world economy and to attain higher growth rates. Until recently, the focus of South Asia's trade liberalization efforts has been unilateral. However, in recent years, the region has made attempts to foster increased trade through a series of bilateral agreements, mainly between India and its neighbors, and multilateral agreements, such as the Bangkok Agreement. In 1995, the seven South Asian countries—Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka—turned over a new leaf in regional trade relations by initiating a multilateral framework for region-wide integration under the South Asian Preferential Trade Agreement (SAPTA).¹ In a recent initiative, members agreed that SAPTA would begin the transformation into a South Asian Free Trade Area (SAFTA) by the beginning of 2006, with full implementation completed between 2009 and 2013. The initiatives for SAPTA and SAFTA are a departure from previous accords that had narrower mandates to increase regional trade and protracted negotiations on the removal of barriers to trade.

The impetus toward regional preferential trading arrangements and greater regional economic integration raises many important issues, both for the South Asian region as a whole and for the individual countries. Although economists have studied these issues, including the policy options and empirical consequences of both preferential trading arrangements (PTAs) and

¹ See Pursell and Pitigala (2001) for a detailed account of the motives and basic tenets of various trade agreements accorded between the South Asian countries.

free trade agreements (FTAs) in other parts of the world, so far there has been little systematic work that could inform the continuing and expanding negotiations in South Asia. There have been several important studies of regional South Asian trade, some completed in the mid-1990s, prior to the recent drive toward SAFTA and the formation of bilateral FTAs within South Asia.² There is a general lack of information about the structure of recent trends in trade and what they imply about the prospects for further regional integration.

This paper is part of a larger study under “South Asia’s Trade Integration: Policies and Prospects Program,” a joint initiative of the trade team of the World Bank and PREM Sector Unit on South Asia (SASPR). The main objective of this paper is to evaluate whether South Asia possesses certain fundamental conditions (defined by empirical evidence) to become a successful trading bloc. It should be noted, however, that this paper deals solely with static trade effects. Many economists have argued that the benefits of an FTA, such as SAFTA, stem from dynamic gains, such as increased foreign direct investment to smaller countries, greater political stability and cooperation, and/or enhanced credibility of reform efforts. These issues, however, are not under the purview of this paper. While this paper does not directly address the net welfare effect of trade creation and trade diversion, it relates to these effects as implied by the various conceptual propositions.

It must be noted at the outset that official accounts of South Asia’s international trade statistics are flawed by the high incidence of informal trade between India and its neighbors. Available estimates (for selected years) suggest that informal trade is even higher than officially recorded bilateral trade between India and its neighbors.³ However, these estimates are based on surveys carried out prior to 1995. It should be noted that it is likely that unilateral trade reforms

² Srinivasan and Canonero. (1994, 1997) and Pigato, Farah, Itakura, Jun, Martin, Murrel and Srinivasan (1997), and recent studies include Panagariya (2001) and Mukherji (2001).

³ Taneja (1999) for estimates of informal trade between India and its neighbors. It must be noted these estimates are based on surveys carried out incorporating important smuggling centers and extrapolated to arrive at national figures. Thus, they are prone to higher margins of error.

undertaken by India and its neighbors since 1995 may have had some impact on diverting informal trade to formal channels such that any increase in intra-regional trade may simply reflect this transfer rather than a real increase in the total volume of intra-regional trade. Therefore, the following analysis must take this possibility into account.

Some Conceptual Issues

A series of recent studies on regional integration provides relevant empirical findings and insights on the conceptual criteria for successful regional trading arrangements.⁴ Long before the recent wave of PTAs and FTAs, Lipsey (1960) put forward the hypothesis of “natural trading partners,” suggesting that the higher the proportion of trade with the region, and the lower the proportion with the rest of the world, the more likely is a regional agreement to raise welfare effects. Summers (1990) reinforced the “natural trading partner” argument, hypothesizing that “to the extent that blocs are created between countries that already trade disproportionately with each other, the risk of trade diversion is significantly reduced.”⁵

While the natural trading partner hypothesis has provided a popular argument and is based on the volume of trade, the hypothesis ignores the effects of trade policy, transport logistics, and other considerations, such as complementarity and competitiveness issues, which are all-important factors that can determine the success or failure of a PTA.

Wonnacott and Lutz (1989) present a modified version of the natural trading partner hypothesis by incorporating location and transportation costs. They find an increasing tendency for countries to trade with other countries in geographical proximity. Deardorff and Stern (1994), also referring to transport costs, suggest that geographical proximity between countries tends to reduce trade diversion.

⁴ See De Melo, Panagariya and Rodrick (1993), Winters (1996), Schiff (1993 and 2001), and World Bank (1995, 1999).

⁵ Disproportionality is defined as a higher proportion of trade within a regional bloc compared to the ROW.

Schiff (1999) argues that the volume of trade does not necessarily provide an objective measure of the extent to which trading partners are “natural.” The reason for this is that the volume of trade is itself affected by trade policy. Schiff (1999) introduces a version of the natural trade hypothesis that is independent of trade policy. He proposes a definition of natural trading partners as a situation characterized by *complementarity* rather than *substitutability*. If a country imports what its trading partner exports, Schiff concludes that the hypothesis of “natural trading partner” is likely to hold.

Proponents who utilize statistical measures such as the *complementarity index* argue that the higher the observed values of the index between partners, the more likely is it that a proposed regional trade agreement will succeed (Michaely, 1996). Furthermore, a substantial empirical literature refers to the existence of complementarity rather than competitive trade as a precondition needed to enhance the probability of a net trade-creating, rather than net trade-diverting, regional trade arrangement.⁶ Countries with different comparative advantage profiles should, in principle, have more opportunities to trade with each other compared with those with similar comparative advantage profiles.

Lastly, the empirical literature refers to the impact of concentration and diversification of exports on regional trade agreements. Yeats (1998) states that studies have shown that countries with highly concentrated exports may experience a relatively high degree of instability in export earnings that could reduce a country’s ability to consistently maintain financial commitments required by regional agreements.

The objective of this paper is, then, to evaluate whether South Asia’s trade patterns meet the conceptual criteria outlined above, which are deemed to be necessary prerequisites for a successful FTA. The approach is based on an examination of trends and characteristics of recent

⁶ Ng and Yeats (2003), Yeats (2001).

and historical “officially recorded” trade patterns and it utilizes a number of quantitative indices and statistical measures to quantify the “strengths” and “inefficiencies” in the region’s trade patterns. The key questions to be addressed include the following:

- How important is South Asia as a trading partner for member countries?
- How has regional trade evolved over time with increased global integration?
- How does South Asia compare with other regional trade blocs?
- Is South Asia’s export product-mix diverse enough to support further regional integration?
- How complementary are the countries’ respective import-export profiles?
- What do South Asia’s comparative advantages reveal about the prospects for increasing regional trade?

The paper is structured as follows. Section I undertakes a detailed evaluation of whether South Asia conforms to the “natural trading partner” hypothesis. The analysis based on the evolution of trade over the past two decades, its direction and, hence, the relative importance of (officially recorded) intra-regional trade between 1990 and 1998. First, it evaluates ‘trade volume’ criteria of the ‘natural trading partners’ hypothesis. A sub-section that follows evaluates the geographic criteria to the “natural trading partner” hypothesis, which attempts to identify whether geography is, in fact, a critical factor in South Asia’s direction of trade. Section II further examines characteristics of South Asia’s trade structure, focusing on whether the region’s export product-mix is diverse enough to support further regional integration. Following a brief overview of regional trade at a more disaggregated level, this section assesses the ‘complementarity’ of intra-regional trade, an alternative approach to characterize the “natural trading partner” hypothesis and a critical prerequisite for the potential success of SAFTA. An analysis of export competitiveness between the countries follows to substantiate or dismiss the evidence of complementarity and/or the lack of it. The paper concludes with an evaluation of the problems and prospects for increasing regional trade in South Asia, and highlights some policy lessons that can guide future efforts.

I. Are the South Asian Countries “Natural Trading Partners”?

Triggered by their desire for export-led development, the South Asian countries began expanding their export orientation toward industrial countries, moving from basic agricultural exports to labor-intensive manufactured exports. During the 1980s and 1990s, international conditions—specifically the multilateral reduction of tariffs under the GATT and the diffusion of production and trade through foreign direct investment—helped the South Asian countries in their quest to enhance their economic development through manufactured exports. As barriers began to fall, industrial countries increasingly sought to rationalize production by transferring labor-intensive manufacturing to low-cost production centers and South Asia became a premier beneficiary. The effect on the textile and apparel sector has been the most notable impact of this transformation as far as South Asia has been concerned. A commanding share of manufacturing and export revenues for all South Asian countries increasingly comprised textile and apparel exports to industrial countries. Although the Multi Fiber Agreement (MFA) regime governed the textile and apparel trade, the quotas extended by industrial countries provided an adequate incentive for South Asian countries to increase trade, via both domestic and international (quota-seeking) investors. The depreciation of real effective exchange rates in the region further assisted the South Asian countries in capitalizing on favorable international conditions.⁷

At a broad level, the available (official) data of the major South Asian countries indicate that industrial countries continue to assume a major share of the region’s trade, while developing countries outside South Asia have been the second most important group, although their importance has been steadily diminishing as seen from Table 1, below. Intra-regional trade, meanwhile, remains low despite a revival in the late 1990s.

⁷ Pigato *et al* (1997).

Table 1: Direction of South Asia's Trade (Constant US\$ Million, 1995)

	IMPORTS			EXPORTS			SHARE OF TOTAL TRADE		
	1981	1990	1998	1981	1990	1998	1981	1990	1998
South Asia	618	733	3,293	556	837	2,814	3.2	2.4	5.0
East Asia	2,084	4,764	15,000	688	2,198	5,548	7.5	10.8	16.7
Other Developing	11,579	11,868	21,529	5,624	8,100	12,523	46.7	31.1	27.8
Industrial Countries	11,091	20,201	29,702	4,593	15,549	32,281	42.6	55.6	50.5

Source: IMF Direction of Trade Statistics.

Notes: Oil imports are excluded from the South Asia's data. All Middle East, the post-Soviet Republics and Eastern European countries are categorized under "Other Developing Countries (which excludes South Asia); East Asia also includes the Rep. of Korea, Taiwan (China), and Hong Kong (China). China is among the "Other Developing" category, as it is not traditionally identified under East Asia.

The above indicates that South Asia has gradually adjusted its direction of trade as it has evolved through both domestic reform and international competitive conditions. In the process, the South Asia region, as a trading partner, has also relatively increased in importance among regional members. But how significant is this emergence and can the South Asian countries be characterized as "natural trading partners"?

Table 2 provides a review of intra-regional trade between 1981 and 1998 at an aggregate level. The overall (official) intra-regional trade as a share of total trade has remained below 5 percent throughout this period. However, these aggregate figures are biased by India's trade patterns, the dominant economy in the region, and therefore do not reflect the extent of intra-regional trade of the smaller countries. There are, in fact, large differences in the relative importance of South Asian markets for individual member countries of the South Asian Association for Regional Cooperation (SAARC).⁸ For example, Bhutan and Nepal trade disproportionately with the region, with shares of regional trade as high as 71 percent and 33 percent, respectively, in 1998 as seen from Table 2. Due to the landlocked nature of these two countries, trade takes place primarily with India. While Nepal has made some efforts to reduce its

⁸ See Annex Table A1.

trade dependence on India, Bhutan remains strongly dependent on India as both a supply source and export destination. For Bangladesh and Sri Lanka, regional trade accounted for approximately 12.4 percent and 8.2 percent of their total trade, respectively, in 1998 (Table 2). Both have increased their shares of intra-regional trade since unilateral reforms were initiated by Bangladesh and continued by Sri Lanka (whose reforms were initiated as far back as 1979) in the early 1990s. For Pakistan, intra-regional trade is relatively insignificant, accounting for a modest 3.6 percent of its total trade in 1998. However, Pakistan, too, has increased its share of regional trade since it implemented reforms, increasing from 2.7 percent in 1990. For India, intra-regional trade is even less significant, accounting for a low 3.2 percent of its total trade in 1998. However, India has shown a noteworthy increase in intra-regional trade since it initiated reforms in 1990 and 1991, years when intra-regional trade accounted for a meager 1.4 percent of its total trade.

Table 2: Officially Recorded Intra-regional Trade as a Share of Total Trade

	Intra-regional Imports				Intra-regional Exports				Total Intra-regional Trade			
	1981	1990	1995	1998	1981	1990	1995	1998	1981	1990	1995	1998
India	1.3	0.4	0.6	1.1	2.9	2.7	5.1	5.6	1.8	1.4	2.7	3.2
Pakistan	1.9	1.6	1.5	2.4	5.5	4.0	3.2	4.9	3.1	2.7	2.2	3.6
Bangladesh	4.7	7.0	17.7	17.5	7.9	3.1	2.3	2.7	5.4	5.8	12.7	12.4
Sri Lanka	5.2	7.0	11.4	12.9	8.8	3.7	2.7	2.4	6.5	5.6	7.5	8.2
Nepal	N/A	13.4	17.5	31.7	63.8	7.7	9.2	36.2	47.4	11.9	15.0	32.8
Maldives	6	7.4	4.5	7.7	22.3	13.8	22.5	16.6	9.4	9.2	6.7	9.4
Bhutan	N/A	10.9	57.5	59.9	N/A	9.6	87.9	81.9	N/A	9.7	73.5	71.8
South Asia	2.4	2.0	3.8	4.3	4.8	3.1	4.3	7.3	3.2	2.4	4.1	4.9
MERCOSUR	N/A	14.5	18.1	N/A	8.9	8.9	20.5	N/A	10.7	14.0	21.3	23.0
Andean Community	N/A	6.4	12.6	12.0	N/A	4.1	11.8	11.9	N/A	7.9	12.3	11.4
ASEAN	13.2	14.6	16.9	20.9	17.2	18.2	23.4	19.8	15.2	16.3	20.0	20.3
EU (15)	57.3	65.9	62.4	61.8	52.9	63.2	61.0	59.4	55.0	64.5	61.7	60.6

Sources: IMF Direction of Trade Statistics.

Notes: Shares for Bhutan are based on partner data (mirror statistics). Please note the presence of discrepancies between FOB and CIF values in mirror statistics.

Intra-regional trade patterns in South Asia suggest that all members increased their relative importance in the region toward the late 1990s.⁹ Although the relative importance of the

⁹ Pitigala and Baysan (2001) argue that the revival of intra-regional trade in the late 1990s has ostensibly occurred due to unilateral trade reforms rather than regional or bilateral agreements. However, increased

region increased in more or less the same ratios for Bangladesh, Nepal, Pakistan, and Sri Lanka, the increases are based more on imports from the region rather than exports. The share of intra-regional imports of Bangladesh increased from 7 percent in 1990 to 17.7 percent in 1998. Nepal increased its intra-regional imports from 4.0 percent to 31.7 percent, Sri Lanka from 7.0 percent to 12.9 percent, and Pakistan from 1.6 percent to 2.4 percent during the same period. However, the relative importance of intra-regional exports has been decreasing for both Bangladesh (from 3.1 percent to 2.7 percent) and Sri Lanka (from 3.7 percent to 2.4 percent) during the corresponding period and remains marginal for Pakistan. This imbalance is partly a consequence of India maintaining a higher level of border protection relative to its neighbors and partly a consequence of Bangladesh and Sri Lanka reinforcing their integration with the industrial countries.

As discussed above, the “natural trading partner” hypothesis, based on the trade volume approach, suggests that members of a regional agreement should trade disproportionately with each other in order to be a successful bloc. It appears that, despite the revival of intra-regional trade since reforms were initiated in the early 1990s, only the smaller landlocked countries can be perceived as having a “disproportionate” share of trade with the region, largely owing to their trade with India. On the other hand, neither India—the largest economy in the region—nor the other economies in South Asia can be regarded as having a “disproportionate” share of trade with the South Asia region.

Members of other successful regional arrangements, such as the European Union and NAFTA, had levels of intra-regional trade that can be characterized as demonstrating that they are “natural trading partners.” At the inception of the EU, intra-regional trade was around 65 percent, and among NAFTA members it was around 41 percent. South Asia does not compare

devaluation of the exchange rate also appears to have had a significant impact on the increase in exports, especially in the case of India.

well, moreover, with other developing region trade blocs, such as Mercosur. For example, prior to the formal launch of Mercosur in 1991, its share of intra-regional trade stood at 14 percent.¹⁰ Similarly, in ASEAN, a relatively high level of regional trade among member countries at the launching of their regional trading arrangements—16 percent—provided the necessary impetus for further regional integration.

If SAFTA is launched from low level of intra-regional trade, lower than any successful regional grouping, such a low base may be evidence that the South Asian countries are not, in fact, “natural trading partners.” The failure to meet this key conceptual criterion for beneficial integration may adversely affect the realization of a successful FTA in the region.

The above estimates of intra-regional trade are based on official trade data, which we know understates the extent of intra-regional trade. Could the above conclusion that the South Asian countries are not natural trading partners be altered if we take into account available “guesstimates” of informal trade in the region? For example, if the reported one billion dollars’ worth of informal trade between India and Pakistan cited by Taneja (1999) is incorporated, it would boost Pakistan’s share of intra-regional trade to around 14 percent of its total trade (referring to 1998 survey results), although it would still fall below the level of trade it undertakes with the United States (19 percent) and the European Union (22 percent) in the corresponding year. While informal exports to India from Bangladesh, Nepal, and Sri Lanka are relatively high, they comprise a sizable share of third-country goods that originate beyond regional sources. However, these national guesstimates of informal trade based on a sample survey of key locations may have high error margins and, hence, may not be fully reliable. Even with a less conservative

¹⁰ Mercosur’s initial members were Argentina, Brazil, Paraguay and Uruguay. Chile and Bolivia became members in 1996 in 1997, respectively. Immediately following the establishment of a common external tariff in Mercosur in 1995, there was a sharp rise in intra-Mercosur trade, to 23 percent in 1998, almost four times as much as the share of intra-regional trade in South Asia.

estimates of informal trade are accounted for it is implausible to characterize the South Asian countries as “natural trading partners” based on their trade volumes.

Trade Intensity and Geographical Proximity

It is argued that countries in relative geographical proximity tend to trade more with each other than with more distant countries owing to lower transport and communications costs (Deardorff and Stern, 1994). Wonnacott and Lutz (1989) also refer to transport costs, suggesting that geographical proximity between countries tends to increase trade between them and reduce trade diversion. Regional trade in South Asia tends to be centered around India, which, for most of the smaller countries, is the closest neighboring country. However, as demonstrated in Annex Table A1, there exists very little or no trade among the smaller countries, such as Bhutan, Maldives, and Nepal, which are in relative proximity compared with the more distant industrial countries with whom they trade more. This suggests that there may be other factors—such as transport and logistical impediments that give rise to high transaction costs, or the lack of trade complementarities—which account for the apparent low levels of trade. Taneja (2000) points out that high transaction costs induced by inefficient institutional designs are the premier factors diverting trade between India and its smaller neighbors into informal channels, circumstances that may also explain the low levels of trade between the landlocked countries and others in the region. This might imply that tariff preferences alone would not be sufficient to stimulate regional trade.

While the preceding analysis, based on broad trade trends, has shed some light on prospects for further regional integration, it would be informative to evaluate whether the South Asian countries, given the size of neighboring markets, export to the region as much as could be expected and whether regional trade, from this perspective, has changed over time. The trade intensity index (TII) is a useful tool for evaluating these questions in the context of South Asia.

The TII reflects the increase in “trade intensity” among countries.¹¹ Specifically, the TII can highlight the relative importance of evidently low levels of trade (in absolute terms) between countries. If the TII value is above or below unity, the countries have greater or smaller bilateral trade flows than would be expected based on the two partners’ share in world trade. The TII is defined as:

$$(1) \quad I_{ij} = (X_{ij} / X_i) / [M_j / (M_w - M_i)]$$

I_{ij} , country i ’s exports to country j , is defined as the share of country j in country i ’s total exports (X_{ij} / X_i), relative to the share of j ’s imports, M_j , in total world imports, net of i ’s imports from the rest of the world ($M_w - M_i$). For those trading partners that have TIIs greater than unity, their trade relationship can be defined as “intensive” (i.e. the countries trade more than would be expected given the relative size of the market for imports). An analysis of changes in these indices over time can show whether two countries are experiencing an increased or decreased tendency to trade with one another. An increasing tendency may reinforce prospects for further integration, while a decreasing tendency would diminish such prospects.

However, the indices will only be of limited use if we fail to take into account distance, language, culture, and religion, among other factors that may influence trade patterns – and, if possible, the TII should be adjusted to take account of all these influences. In order to account for geographical distance factor, an attempt is made to normalize the TII results by regressing for distance. The charts in Figure 1 provide a graphical representation. The charts plot the TIIs for each of the South Asian countries against the geographic proximity of each country (moving from left to right, geographic distance decreases). For those countries located above the regression line, the South Asian country in question demonstrates a “real” intensive trade relationship (i.e. the South Asian country exports more to the selected country than would be expected given both the

¹¹ See Braga, Safidi and Yeats (1994), Anderson and Blackhurst (1993) for an application within the context of RTAs.

relative size of its import market and its geographic proximity). The results are provided for two years, 1990 and 1998, to illustrate whether the South Asian countries demonstrate an increasing or decreasing tendency to trade with one another.

Table 3: Trade Intensity Ratios of South Asia

PARTNER COUNTRY	EXPORTING COUNTRY									
	India		Pakistan		Sri Lanka		Bangladesh		Nepal	
	1990	1998	1990	1998	1990	1998	1990	1998	1990	1998
India	-	-	1.28	3.14	1.55	1.29	1.89	1.88	10.19	42.81
Pakistan	1.16	2.28	-	-	8.11	4.09	6.57	4.58	1.48	1.10
Sri Lanka	7.55	12.84	17.57	9.89	-	-	6.52	0.24	0.66	16.63
Bangladesh	15.94	21.86	16.34	9.71	4.95	0.94	-	-	2.82	9.72
Nepal	13.22	35.03	1.22	3.57	0.25	1.70	26.19	18.45	-	-
Maldives	6.67	2.41	2.51	2.80	44.00	40.00	N/A	N/A	N/A	N/A
Bhutan	0.00	16.34	0.22	0.54	N/A	N/A	2.32	4.36	N/A	9.04
US	1.02	1.26	0.84	1.3	1.75	2.17	2.06	2.15	1.58	1.55
UK	0.98	1.05	1.16	1.23	0.89	1.75	1.12	1.66	0.90	0.21

Note: Calculations are based on data from the IMF Direction of Trade Statistics

While the South Asian countries demonstrate TIIs (not normalized) greater than unity, some relatively increasing and some decreasing as seen from Table 3, when normalized for geographic proximity, their relative importance to each other becomes less pronounced. This is illustrated from statistics in Table 4 which reports the ratio of observed to predicted TIIs for each of the countries, thus demonstrating the magnitude of the difference in actual (not normalized) TIIs and the TII that would be predicted given the geographical distance (i.e. at a given point along the regression line). For example, India's "real" trade intensities, normalized for geographical proximity, with the other South Asian countries are stronger than that implied by its bilateral trade shares. In 1998, India traded more than 3 times as much as should have been expected with Sri Lanka, more than 5½ times as much as should have been expected with Bangladesh, and 8 times as much as should have been expected with Nepal.

However, for the peripheral countries, trade with the region is below what should have been expected given the size of the partners' import market and their geographical proximity. For

example, Pakistan, Bangladesh and Sri Lanka's trade with India is less than what should have been expected. Pakistan's trade intensity with India—which appeared positive and growing—once adjusted for geographical proximity, falls below what should have been expected. Nepal is the only SAPTA member that increased its relative share of trade with India well above what should have been expected (more than 5 times). This augurs well for the prospects of the existing bilateral trade agreement between these two countries, to the extent that free trade is devoid of trade diversion. Interestingly, Pakistan is gradually moving toward a level of trade with India consistent with what should have been expected. Overall, however, the results for bilateral trade between the smaller periphery countries are unconvincing—there is no clear trend toward increased trade between them. Instead, there is evidence of diminishing levels of bilateral trade intensity between Pakistan and Bangladesh, Sri Lanka and Pakistan, Sri Lanka and Bangladesh, Bangladesh and Sri Lanka, and Nepal and Bangladesh.

More noteworthy feature of the analysis is that the South Asian countries have shown an increasing tendency to trade intensively with partners elsewhere in the world for cultural, ethnic, or religious reasons. As shown in Figure 1 Pakistan provides the strongest evidence of this pattern—its trade with more geographically distant trading partners, particularly the Islamic countries in Africa and the Middle East, has grown in importance compared with its regional partners. It is interesting to note that the destinations with high TIIs (above the regression line) shown by both India and Pakistan and, to some extent, Bangladesh, are countries with significant migrant communities from what was once Greater India. This may be evidence that cultural and linguistic affinity can be important determinants in reinforcing trade between countries that are not in geographical proximity.

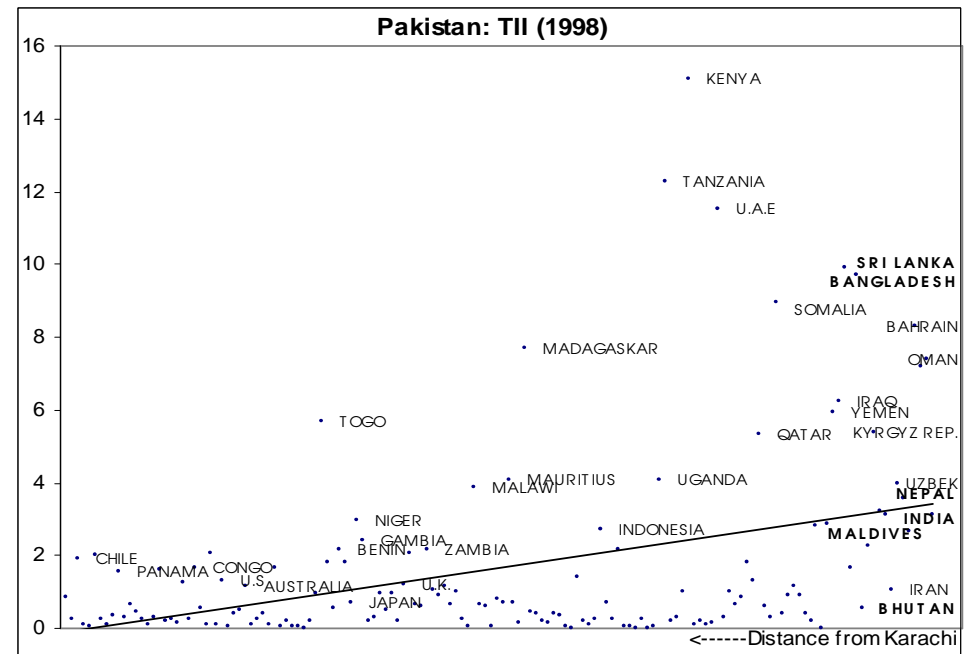
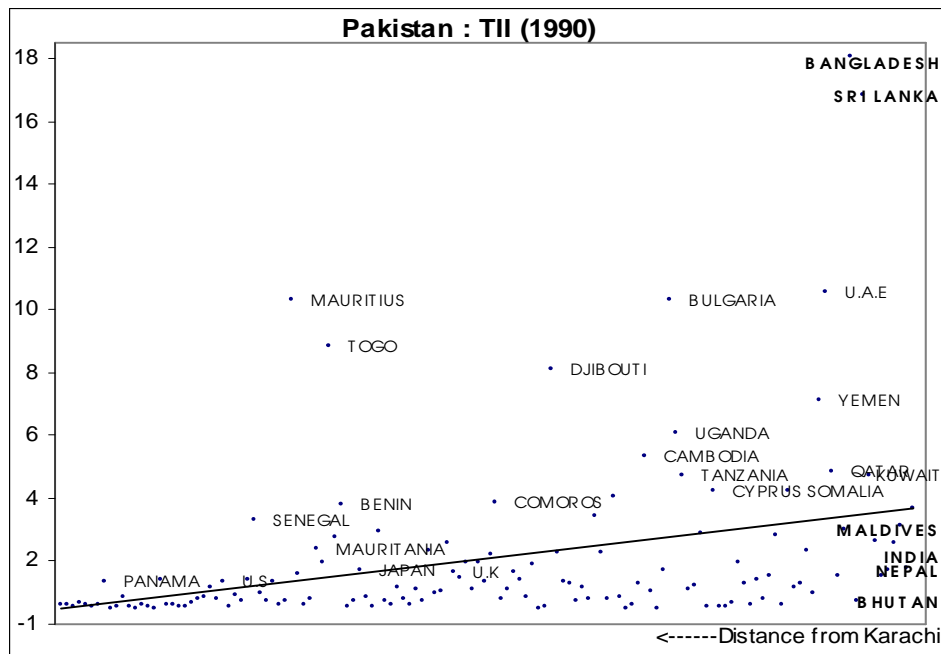
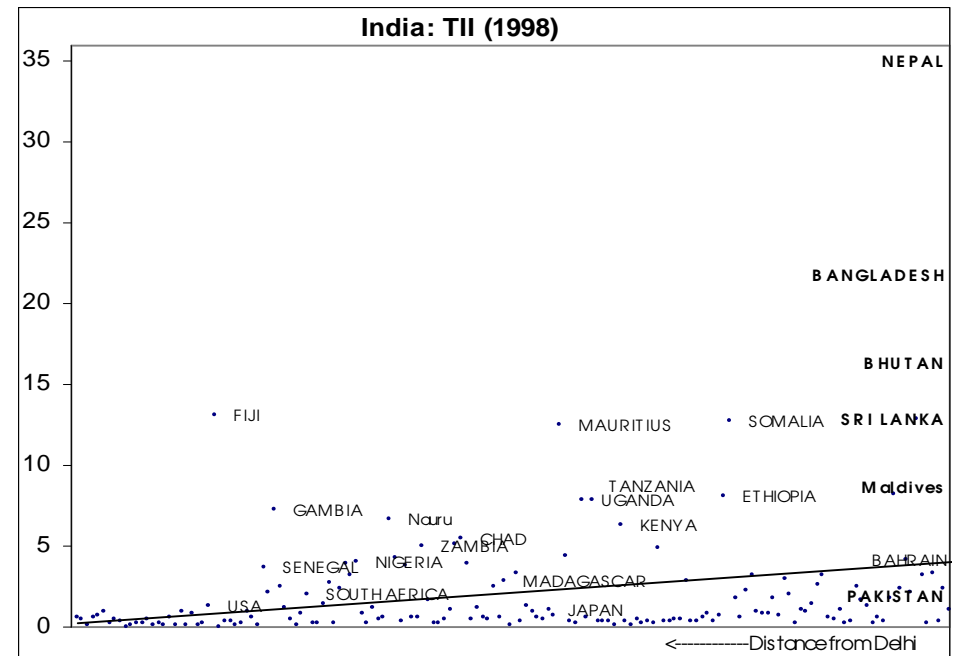
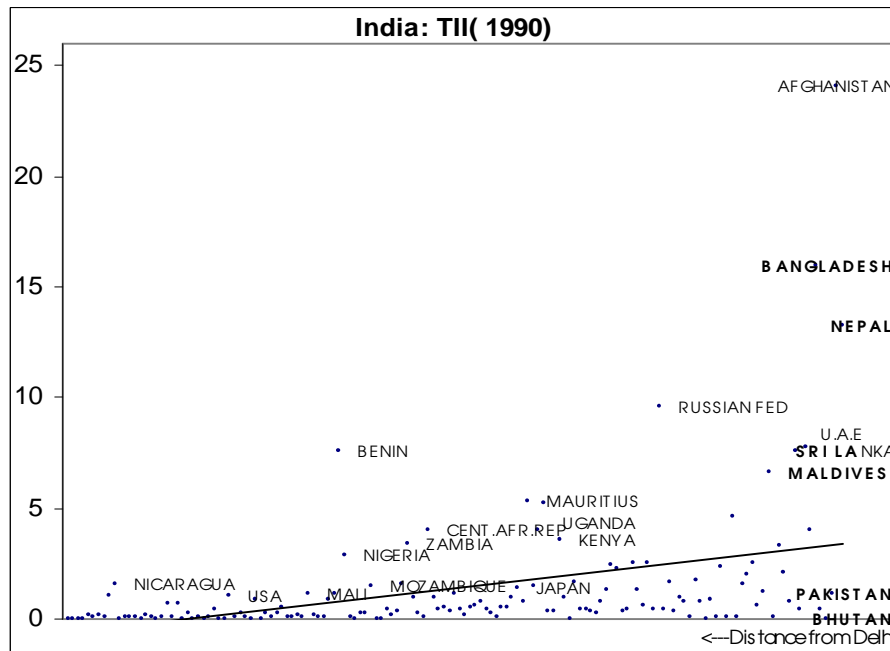
Table 4: Ratio of Observed TIIs to Predicted TIIs

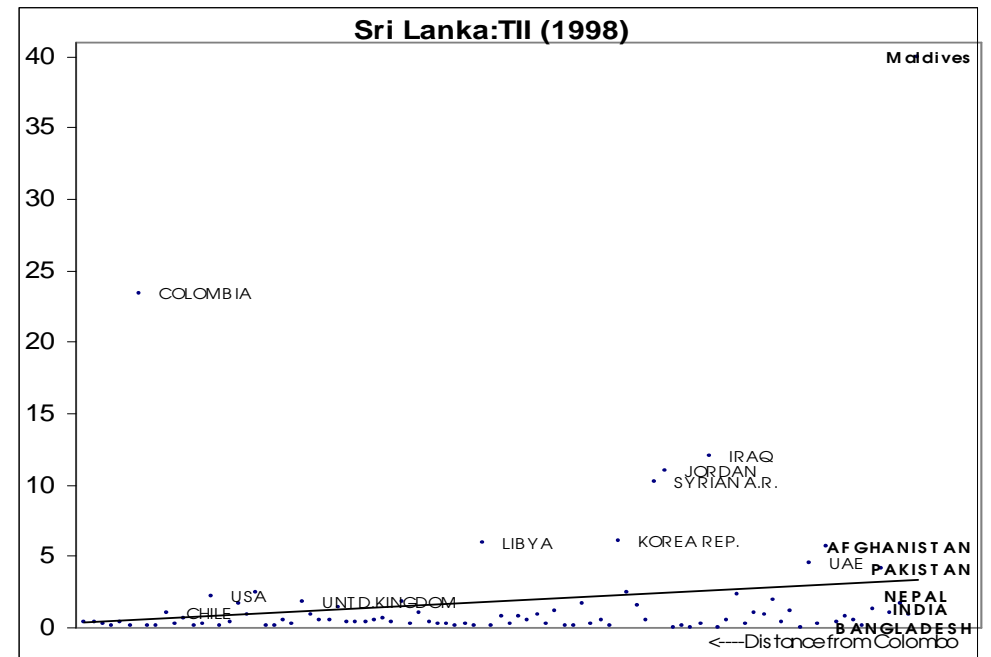
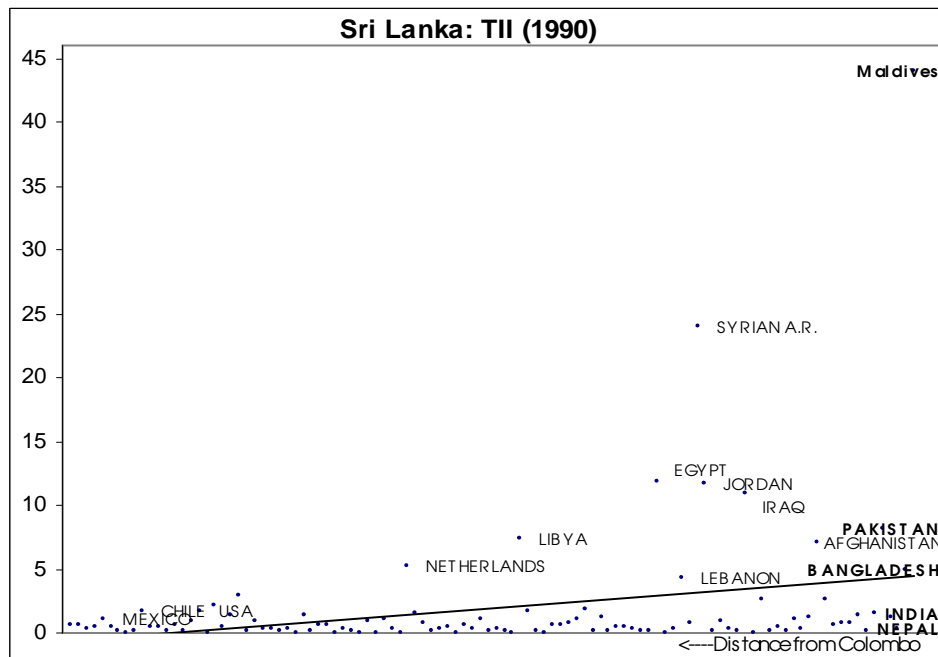
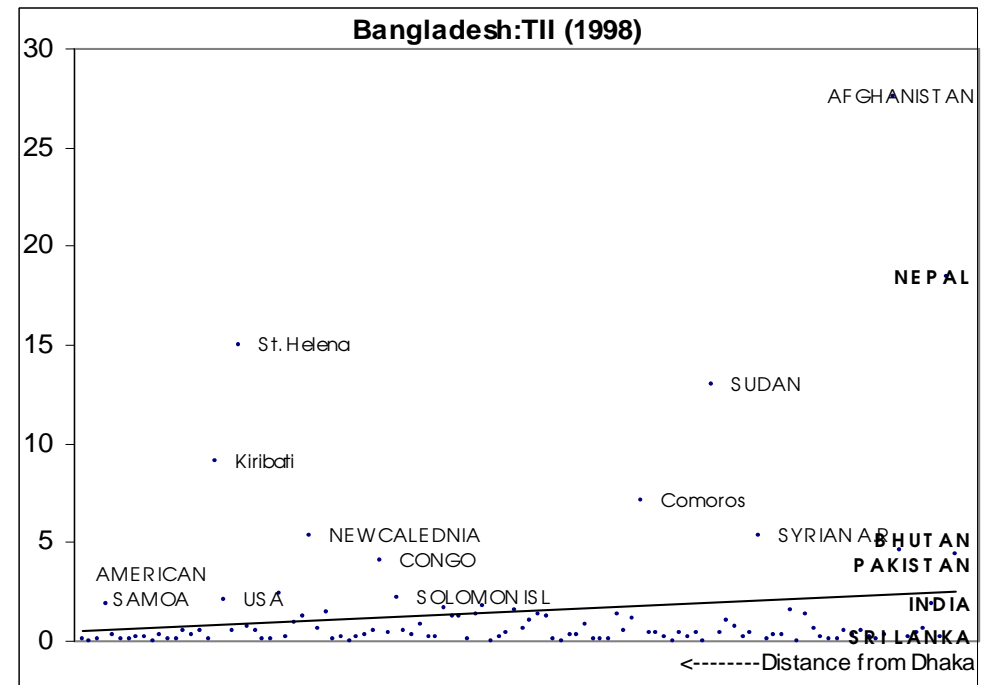
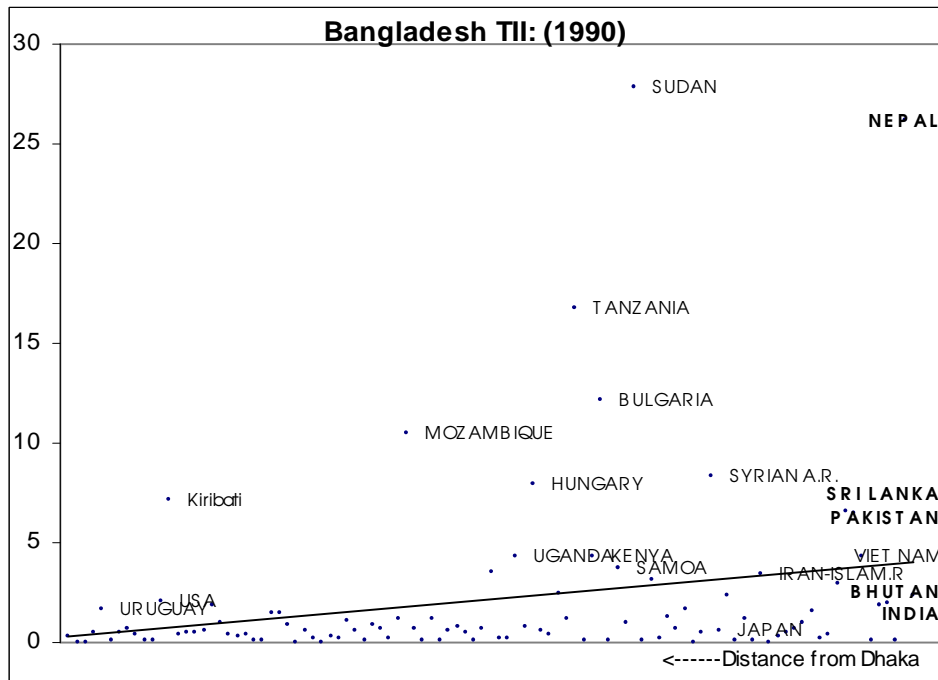
Partner Country	Exporting Country									
	India		Pakistan		Bangladesh		Sri Lanka		Nepal	
	1990	1998	1990	1998	1990	1998	1990	1998	1990	1998
India	-	-	0.41	0.92	0.49	0.76	0.37	0.40	5.61	6.07
Pakistan	0.34	0.56	-	-	1.79	1.90	1.93	1.25	0.83	0.17
Bangladesh	4.83	5.46	9.60	3.13	-	-	1.14	0.28	1.51	1.27
Sri Lanka	2.37	3.34	4.17	3.23	1.76	0.10	-	-	0.41	22.15
Nepal	3.84	8.50	0.40	1.08	6.66	7.30	0.06	0.51	-	-
Maldives	2.19	0.64	0.86	0.95	N/A	N/A	10.01	11.73	NA	-
Bhutan	-	4.03	0.07	0.17	0.58	1.71	N/A	N/A	N/A	1.18
US	4.99	1.53	1.46	2.37	3.13	2.59	16.02	2.58	37.31	0.70
UK	0.76	0.56	0.81	0.97	0.76	1.23	0.80	1.49	2.05	0.30

Note: Calculations are based on data from the IMF Direction of Trade Statistics

Overall, the trade intensity indices and their movements from pre-reform to post-reform periods do not demonstrate a consistent positive relationship for all countries in the South Asia region. A positive increase in the TII appears only between India and Nepal; in other cases, the bilateral relationships are asymmetric and/or in decline. The evidence also supports the earlier observation that South Asia does not appear to fit the hypothesis that geography is a strong determinant of trade. Instead, those countries with which the South Asian countries demonstrate real intensive relationships (that is, those with TIIs above the regression line) tend to be well dispersed along the distance axis. The evidence of irregular, incoherent “trade intensity”, given the geographic proximity and relative size of trade, cannot be interpreted as a positive sign for a rapid increase in regional trade.

Figure 1: South Asia: Real Trade Intensity (1990 & 1998)





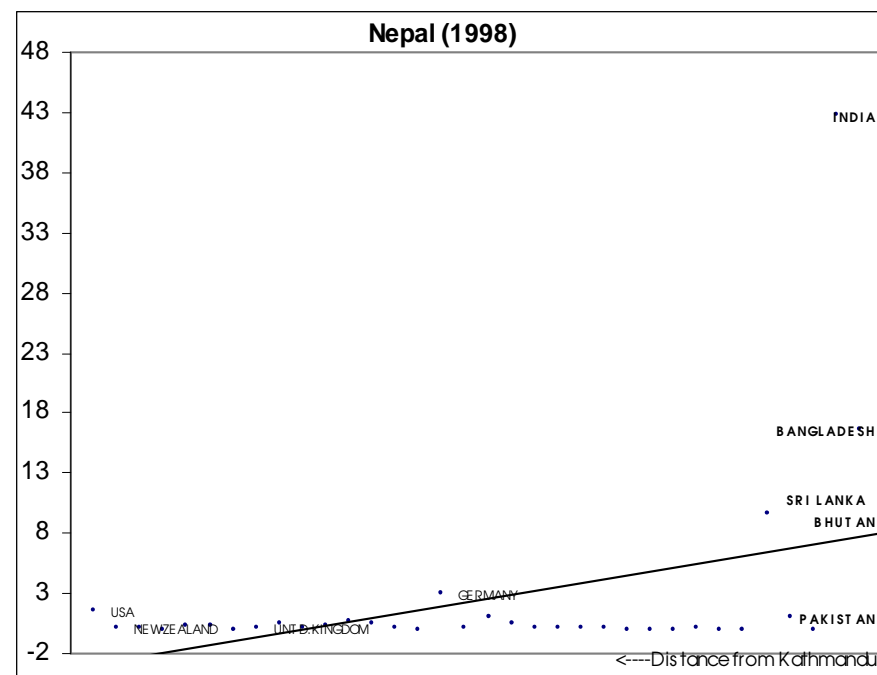
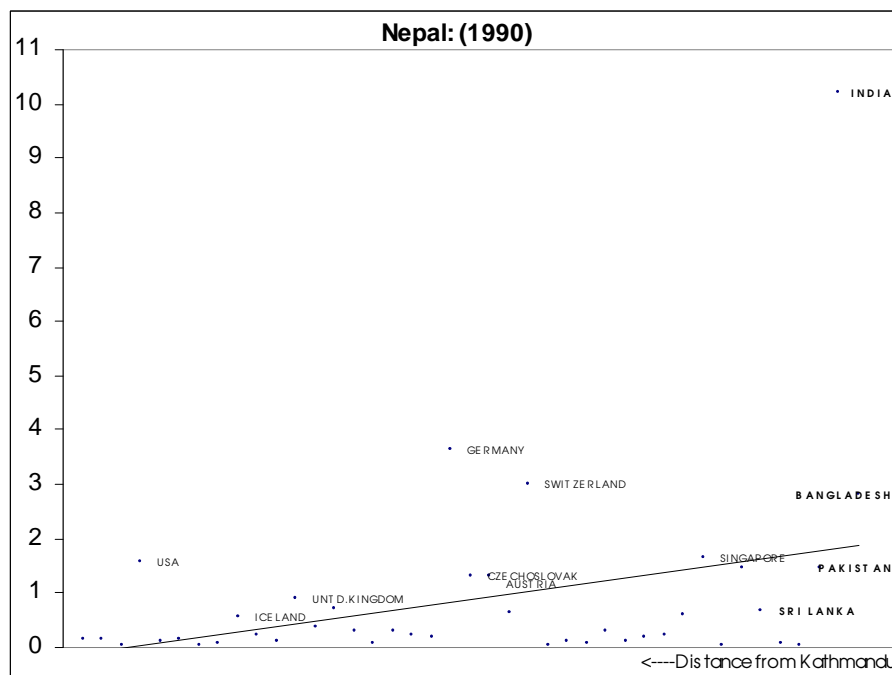


Table 5: Regression Coefficients: Real Trade Intensity

Country	1990	1998
India	-0.03 (0.01)	-0.02 (0.01)
Pakistan	-0.02 (0.01)	-0.02 (0.00)
Bangladesh	-0.04 (0.01)	-0.02 (0.01)
Sri Lanka	-0.05 (0.02)	-0.03 (0.02)
Nepal	-0.05 (0.02)	-0.29 (0.11)

Source: Author's calculations using Comtrade data.

II. Prospects of Intra-Regional Trade: a Product-Level Assessment

The success of the regional trade agreement may depend crucially on the extent to which the core market, India, given its relative size, becomes more accessible to its periphery and vice versa. In this context, the prospects of increasing regional trade may depend more on the existence of product complementarities and export efficiencies (defined by comparative advantage) and other characteristics such as the degree of concentration and diversification of trade profiles amongst the regional partners, particularly between India and the other countries of the region. These are evaluated in detail in the following section. A useful beginning to the analysis is a review of trade structures at a broad level.

An analysis of product-level trade data, at the SITC heading level in Table 6 suggests that agriculture and primary materials have dominated intra-regional trade in South Asia for the past two decades. For example, in 1998 the percentage of regional exports that originated in food and live animals was over 60 percent for Pakistan, 41 percent for India, 35 percent for Sri Lanka, and 34 percent for Nepal. For Bangladesh, crude materials were its major regional exports, with a share of 60 percent of total exports. In contrast, South Asia's exports to the rest of the world are dominated by manufacturing products.

The data in Table 6 also reveal that, although food and live animals constitute a major share of regional exports, there have been large fluctuations over different periods. Such fluctuations are due to the import demand for basic food products such as rice, vegetables, fruits, pulses, onions, potatoes, and sugar, which vary with domestic supply conditions and, which, in turn, strongly impact the trade policies of respective member countries. The SACs often exercise arbitrary policies to maintain stable domestic prices in these "essential commodities." When shortfalls occur domestically imports are encouraged and when the domestic supply is stable, restrictions are re-imposed, explaining the large swings in export shares.

A further insight into product-level breakdown is necessary to highlight the nature and characteristics of regional and extra-regional trade patterns to capture the anomalies that may have had an

impact on the formation of SAFTA. Table 6 provides several tabulations of the raw data. It shows the product-level breakdown of regional and extra-regional exports; their shares in total exports for 1998, and product shares in export growth between 1990 and 1998.

The country-level, disaggregated data in Annex Table A3 confirms the apparent skewness in intra-regional trade discussed above. For example, India's regional exports in 1998 are dominated by rice, which accounts for 32 percent of the total. A single item, sugar, which constitutes almost 42 percent of its exports, dominates Pakistan's regional exports, similar to India's,¹² and Bangladesh, similarly, records a 42 percent share from jute exports, while Sri Lanka intra-regional exports are much more diversified. Recent industrial diversification initiatives seem to have made a noteworthy change and Sri Lanka has moved away from exporting predominantly agricultural and primary products.

Nepal's regional exports are overwhelmingly in beans and pulses, with a share of 85 percent of its total regional exports in 1998. Despite a drop in the number of mainly agricultural products exported between 1990 and 1998, Nepal has succeeded in elevating certain manufactured products such as twine, ropes and cables, perfumes, cosmetics and toilet preparations, yarn, and leather, which were among its top 20 exports in 1998. These products were either insignificant or absent in the 1990 regional export mix. The easing of currency restrictions with India and cross-border investments likely impacted Nepal's regional exports in these product groups, 90 percent of which were exported to India.

¹² Pakistan has undergone an acute loss of world market share both regionally and globally due to domestic structural difficulties in cotton production. The East Asian "economic crisis" dramatically depressed international prices for cotton and cotton-based products, which severely affected its competitiveness both within the region and beyond. Furthermore, Pakistan's cotton exports to the region were severely affected due to an import ban imposed in January 2000 by its major regional importer, India. Furthermore, launching of the FTA between India and Sri Lanka would tilt in favor of Indian cotton exports to Sri Lanka over Pakistan. This further epitomizes the complexity involved in efforts to enhance intra-regional trade based on comparative advantage.

Table 6: Product Composition of South Asia's Intra-regional and Extra-regional Exports (1981–98)

	Food & Live Animals		Beverages & Tobacco		Crude Materials		Minerals & Fuels		Animal & Vegetable Fat		Chemicals & Material		Manufacture Goods		Machinery & Transport Equipment		Misc. Manufactures		Gold, Ammunition etc.	
	SA	ROW	SA	ROW	SA	ROW	SA	ROW	SA	ROW	SA	ROW	SA	ROW	SA	ROW	SA	ROW	SA	ROW
India																				
1981	10.2	26.6	0.9	3.4	7.2	10.1	14.6	0.0	0.3	0.2	9.3	4.4	22.8	33.2	31.4	7.6	3.0	14.2	0.2	0.2
1990	11.0	14.0	1.5	0.8	8.3	9.8	0.9	2.9	0.0	0.3	7.7	7.4	40.9	37.4	26.0	7.4	2.6	18.3	0.9	1.6
1995	21.5	15.7	1.0	0.9	3.7	5.1	1.5	1.1	0.1	0.5	11.3	9.8	41.2	38.6	15.7	8.0	2.5	18.4	1.6	1.9
1998	41.1	15.0	0.6	0.6	2.4	4.1	2.0	0.4	0.1	0.5	11.1	9.3	25.3	38.5	13.3	6.9	2.6	22.3	1.5	2.4
Pakistan																				
1995	20.6	8.8	0.0	0.1	25.3	10.9	0.2	1.3	0.0	0.0	1.6	0.4	48.5	54.7	1.8	0.3	1.6	23.2	0.3	0.2
1997	33.9	11.5	0.0	0.1	9.5	4.3	2.1	1.0	0.0	0.0	3.4	0.7	45.7	56.4	1.7	0.2	2.6	25.7	1.1	0.3
1998	63.2	13.2	0.0	0.1	4.9	2.3	0.1	0.3	0.0	0.1	1.8	0.7	26.3	54.0	1.4	0.4	1.7	28.7	0.6	0.1
Bangladesh																				
1981	43.8	15.4	0.0	0.3	24.7	16.5	0.0	0.0	0.0	0.0	6.7	0.6	23.1	64.9	0.2	0.6	0.3	1.1	1.3	0.7
1990	27.4	14.2	0.6	0.1	44.2	6.8	0.6	1.3	0.0	0.0	16.4	1.1	9.1	33.9	0.6	0.9	0.6	41.6	0.3	0.1
1998	29.0	7.1	0.0	0.1	59.6	1.7	0.5	0.2	0.0	0.0	24.7	0.9	7.9	11.4	2.2	1.1	1.7	77.4	0.1	0.2
Sri Lanka																				
1981	65.2	45.0	0.2	0.4	16.2	19.0	14.6	14.2	1.2	1.1	0.3	0.5	1.2	3.6	0.3	0.5	0.8	15.7		0.1
1990	38.7	33.1	0.0	0.3	38.5	7.8	0.9	1.5	8.9	0.4	3.0	1.0	7.1	13.5	1.8	1.9	1.1	36.3	0.0	4.2
1995	41.4	19.7	0.3	1.2	36.5	4.3	0.0	0.7	4.6	0.1	5.8	0.9	7.8	15.5	1.8	2.3	1.8	53.4	0.0	1.9
1998	35.3	16.1	0.4	0.7	22.4	2.3	0.1	0.5	2.6	0.1	4.1	0.8	23.5	14.4	5.6	4.6	5.9	60.3		0.3
Nepal																				
1981	65.4	42.9	0.0	0.0	19.6	18.7	0.0	0.0	3.7	2.2	5.7	3.4	5.3	25.9	0.0	2.0	0.1	3.8	0.2	1.2
1990	62.0	11.3	0.1	0.3	24.9	4.0	0.0	0.0	1.9	0.8	2.0	0.5	7.5	51.8	0.0	0.0	1.7	31.0	0.0	0.3
1998	34.2	3.0	0.0	0.0	0.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	53.6	0.1	0.2	0.2	39.0	65.0	3.4
Bhutan																				
1981	0.0	72.7	0.0	0.0	0.0	0.9	6.4	0.3	38.9	1.7	37.3	4.0	16.3	3.3	1.1	4.5	0.0	85.2	0.0	0.0
1995	15.7	20.4	7.5	9.7	11.2	14.5	25.7	33.3	0.0	0.0	20.4	26.5	18.9	24.4	0.0	0.0	0.5	1.2	0.0	0.0
1998	28.3	3.8	1.5	0.0	6.5	9.9	4.5	37.1	0.0	0.0	5.3	1.2	53.2	17.7	0.6	15.1	0.0	14.9	0.0	0.3

Source: Based on WITS database, World Bank

SA=Intra-Regional South Asia Trade; ROW=Rest of the World. The product classifications are based on SITC 2-digit heading (Rev. 2). *Food and Live Animals* includes meat and meat preparations, dairy, fish, vegetables sugar coffee; *Minerals and Fuel* includes petroleum products, gas etc.; *Chemicals and Material* includes fertilizer; *Manufactured Goods* includes textile yarn, rubber products, iron and steel etc.; *Misc. Manufactures* includes articles of apparel and clothing.

India and Pakistan are the only countries that have succeeded in exporting a noteworthy share of manufacturing products to the region. India in particular displays a higher regional orientation for manufactured products spanning a broad array of product groups. India's leading regional manufactured exports during this period included motor vehicles, cotton yarn, medicines, textiles, and apparel.

The comparatively high intra-regional trade ratios for manufactured goods displayed by India suggest that it has developed "appropriate technology" (i.e. technology that meets basic functional features but are comparatively low cost) to meet demand in the region as substitutes for products from industrial countries. The ascendance of certain manufactured exports differentiated between what used to be the industrial countries' domain such as automobiles, pharmaceuticals, and agricultural implements. These highly segmented industrial products accounted for 36 percent of India's regional exports, compared with 7 percent of its exports to the rest of the world.¹³ This development illustrates the segmentation of India's evolving "comparative advantage,"¹⁴ i.e. its ability to fulfill, to a certain extent, the region's demand for manufactured goods, a characteristic that the other countries have not sufficiently demonstrated.

In summary, the region has established a mutual dependency in basic foods and agricultural products, although they are not fully liberalized. A narrow group of products on which most countries display comparative advantage has made inroads in regional trade and are mostly made up of agriculture and raw material for manufacture. The exception is India. The extent to which Bangladesh, Nepal, and Sri Lanka initiated trade policy reforms resulted in sizable increases in imports from India both in agriculture and manufacture. They helped India expand as well as diversify its exports to the region during the period 1990–98.

Box 1: The Impact of Trade Reforms

Trade reforms in fact helped South Asia to increase regional and extra-regional trade between 1990 and 1998.^{B1} The reforms reduced the levels of protection, but stimulated only a moderate shift in the product

¹³ Comparison based on SITC 4-digit exports.

¹⁴ A further interesting observation is that India seems to be acquiring market share particularly in other developing countries beyond the South Asia region for this group of manufacturing products, conceivably emerging from typical demand attributes to suit those in the region.

mix exported by the South Asian countries to the region, with the exception of India. India's regional exports increased both vertically (in value) and horizontally (in the number of product categories); see Annex Figure A1. India displayed an increasingly diversified export basket to the region, for which it increased its range of products by 33 percent between 1990 and 1998. Bangladesh, Pakistan, and Sri Lanka all had moderate to insignificant changes in their export baskets.

Certain regional exports among SACs dropped out during the mid-1990s owing to either supply-side weaknesses or increased competition from East Asian countries. Nepal has undergone a unique change in regional trade compared with the other members in the region. Annex Figure A1 provides a graphical view of changes in product clusters in three broad sectors: agriculture, crude material, i.e. jute, rubber, and manufactured goods. Nepal's export basket to the region shrank considerably between 1990 and 1998, with a 60 percent reduction in the range of goods exported to the region. The raw data and Figure A1 demonstrate a critical feature: the increase in exports since reforms in the early 1990s has more or less occurred within the existing range of products for most SACs. In the case of Nepal, the expansion has been in a significantly smaller range of products compared with 1990.

^{B1} Pitigala et al. (2001).

In contrast, manufactured goods dominate South Asia's extra-regional exports. India's manufacturing exports are much more dispersed than those of the other South Asian countries. Cut diamonds, jewelry, cotton yarn, textiles, and leather products and their sub-categories are prominent Indian exports. Pakistan's exports to the rest of the world are dominated by raw cotton and cotton-based products, representing an estimated 67 percent of its exports. Where Bangladesh and Sri Lanka are concerned the overwhelming global orientation is in textiles and apparel. For example, a staggering 75 percent of Bangladesh's global exports consist of apparel, which experienced a fivefold increase from 1990 to 1998. Meanwhile, Sri Lanka's exports in apparel constitute a share of 50 percent of the total in 1998. However, tea continues to be Sri Lanka's highest single export; the country recently emerged as the world's largest exporter in tea.

Implications of the Divergence and Concentration of Export Structures

It appears from the above that there are several inconsistencies in the region's trade patterns that need further examination. First, there appears to be a significant divergence¹⁵ between products that are exported to the region and to the rest of the world. While primary products dominate intra-regional trade, manufactured products dominate exports to the rest of the world. India is the only exception, having achieved some symmetry in exports with the region and the rest of the world. This is mainly a consequence of the restrictive trade regimes particularly in India, Bangladesh and Pakistan despite measures to reduce them in recent years.¹⁶ Another explanation appears to be India's growing efficiency in a range of agriculture as well as manufactured products (discussed further, below). The ability to increase regional exports is contingent on the degree to which dynamic exports¹⁷ are incorporated in the regional export mix.

Secondly, the exports of most member countries (with the exception of India) seem to be confined to a few products, that is, a small number of products seem to accumulate a significant share of exports revenues. The likely success or failure of any proposed regional trade arrangement is contingent on the range of products prospective members have the capacity to export or import. If the members export a wide range of diversified goods, this is a positive factor. If their exports are concentrated, it will limit the prospects of increasing regional trade.¹⁸

Table 7 presents a summary of the divergence and concentration estimates to further examine the two propositions, above. The summary is derived from raw data in annex Table A3. The data are for products that

¹⁵ Divergence is defined as the departure of intra-regional exports from extra-regional exports in major product categories.

¹⁶ See Pigato et. al and Pitigala et al (2001) for more details on trade reforms in South Asia in the 1990's.

¹⁷ Dynamic exports are defined as those growing higher than the average.

¹⁸ "The underlying assumption is that the higher the level of export diversification, the better the prospects for a successful regional initiative. The more diversified a country's exports the greater the range of potential products that can be traded with regional partners. If only a limited number of such goods exist, members of an RTA may have to rely heavily on third countries for a higher share of its key imports (and as a destination for their major exports), and this would be likely to reduce their commitment to and perceived benefits from the arrangement" (Yeats, 1998).

accounted for 75 percent of the growth in exports destined to the region and to the rest of the world between 1990 and 1998.¹⁹

The data suggest that Pakistan and India have experienced limited consistency in terms their dynamic exports to the rest of the world also being exported to the region. Evidence from all other SACs shows weaker coherence. The disparity is extreme for Bangladesh and Nepal. For example, not a single product that accounted for 75 percent of Nepal's growth in exports to the rest of the world is represented in the growth of its regional exports; whilst, in case of Bangladesh, only 1 percent of those goods exported to ROW are represented in intra-regional trade. The extent to which the relative share of regional trade can be increased depends on the extent to which countries' dynamic exports are represented in regional trade. In this context prospects for greater regional exports for Bangladesh, Nepal, and Sri Lanka, in particular, do not appear to be encouraging. The increase in intra-regional trade in recent years, as spectacular as it may seem, materialized within the existing exports that are not among these countries' dynamic segments.

A relatively high level of concentration in exports for Nepal confirms that the country has a narrow export base compared with the other countries. For example, the raw data in annex Table A3 show that two products at the SITC 4-digit category accounted for 75 percent of Nepal's export growth to the ROW. Export growth of Bangladesh and Pakistan too are relatively concentrated. Sri Lanka export growth is more diversified. India, in contrast, compares well with newly industrial countries; its greater dispersion of exports confirms its broad export structure.

Table 7: Divergence and Concentration Summary

	India	Pakistan	Bangladesh	Sri Lanka	Nepal
Divergence of Exports - Regional exports that match exports to the ROW as a share of the latter *	18%	22%	1%	10%	0%

¹⁹ The products ranked on growth levels are chosen as they better reflect the dynamic products than mere trade values. The cut-off point of 75 percent was chosen to exclude marginal products that may not be reported regularly. The SITC 4-digit product classification is the highest level of disaggregation for which the comparisons can be carried out because consistent reporting of data is inaccessible at further disaggregated levels, such as the SITC or Harmonized 6 to 8-digit level.

Concentration of Exports – Number of products accounting for 75% of export growth to the ROW (Annex Table 3) **	47	11	7	22	2
Share of Textile and Apparel in total exports #	28.2	72.8	82.7	52.1	60.1

Notes: * Products shown in each country's regional exports that match exports to the ROW that were among its dynamic exports (products which accounted for 75 percent of total export growth between 1990-1998). The share for Nepal must be treated with caution, as a large share of its regional exports were reported under SITC 9310 (miscellaneous category), and therefore do not fully reflect the extent of "divergence".

** Export growth between 1990 and 1998. Out of a possible 1252 products (using the number of products exported by U.S. in 1998 as a benchmark) reported under the SITC 4-digit level.

Based on authors calculations for year 1998.

Central to the concentration of exports by Bangladesh, Nepal, Pakistan, and to some extent Sri Lanka is the dominance of textiles and apparel. Over 85 percent of Bangladesh's exports are concentrated in textiles and apparel. Textile and apparel bias is not too different for Nepal, Pakistan, and Sri Lanka, where its dominance ranges from 60 to 70 percent. The textiles and apparel sector is heavily protected in most countries. Although Sri Lanka has drastically reduced the level of protection in the sector, most other countries in the region have been somewhat reluctant to undertake sweeping reforms. Furthermore, India maintains a vehement opposition to the inclusion of textiles and apparel under SAPTA, although tariff rate quotas were allowed to a limited extent under the India-Sri Lanka bilateral trade agreement.

In sum, divergence and concentration data on the part of Bangladesh, Nepal, and Sri Lanka, and to some extent Pakistan, do not auger well for a rapid increase in regional trade. The prospects of increased regional exports, contingent upon the degree to which dynamic exports are incorporated in the regional export mix, do not appear to be the case in South Asia. The divergence can be discerned from the underlying shift of South Asia's trade, which has undergone a greater orientation toward unskilled and semi-skilled manufacturing products for which the SACs appear to compete with each other in third markets.

Furthermore, the heavy bias demonstrated by the concentration of exports may complicate prospects for increasing regional trade. Except for India, most countries in the region export a narrow range of goods, dominated by textiles and apparel. Reforms that have helped reduce the general level of protection have nevertheless retained a relatively high level of protection for textiles, apparel, and certain manufacturing products. Furthermore, SAARC members other than India have the capacity to export a limited range of products. Unless the export base undergoes a substantial diversification that complements the imports of

regional members, prospects for increasing regional trade may be limited. The current resistance to the further liberalizing of such products will limit the prospects of increasing regional trade in the near future. Moreover, the value added criteria under SAPTA rules of origin remain an effective deterrent for countries such as Sri Lanka to exploit any preferences that may be accorded under an FTA.²⁰ The SACs also need to be wary of increasing competition that will emerge from phasing out the MFA. Empirical evidence suggests that South Asia overall will gain from the abolition of the MFA, but with results differing by country.²¹

Are there Complementarities among the South Asian Countries?

A further question that periodically emerges in the subject of regional trade is whether the products that member countries export (or have the capacity to export) match the countries' imports from their regional partners. The import requirements of South Asian countries vary based on country size and the level of industrial development. The requirements will continue to evolve as the countries ascend the ladder of economic development and industrialization. India, the region's dominant economy, has a relatively lower ratio of imports to GDP consistent with its larger size, yet the country has a broad array of import needs compared with a country such as Bhutan, which has far narrower and limited imports despite its large trade to GDP ratio. If the type of goods some South Asian countries export coincides with the imports of the others, this should facilitate the regional trade arrangement. If not, it would negatively impact the RTA.²² The issue of complementarity emerges as one of the important elements the empirical literature proposes, including the validity of the "natural trading partner" hypothesis.

It would be useful to have an assessment of complementarity that incorporates current imports and exports as well as potential imports and exports. Such analysis is beyond the scope of the current study. Therefore, the analysis must be based on actual trade flows, which to a large extent provide an indication of the realm of prospective trade. The test of complementarity needs to be evaluated on two fronts. First, as implied above, major import requirements of members must be "matched" with what their regional partners

²⁰ Pitigala, (1998).

²¹ Kathuria, Martin and Bharadwaj (2000).

²² Yeats (1998).

export. Having “matching” products is just one aspect of fulfilling the test of complementarity. Exports that match the import needs of member countries must be relatively efficient so that potential costs from trade diversion are avoided. The central characteristics of international trade based on efficiency are governed by the concept of comparative advantage and specialization. Countries with different comparative advantages and product specializations should have more mutually beneficial trade opportunities than those where a high degree of similarity exists. If there is little difference in the degree of comparative advantage and specialization between countries, and in sectors where aggregate trade is relatively low, this would not favor the eventual success of the trade agreement. One useful measure of specialization, widely used for policy-related studies is the International Revealed Comparative Advantage (IRCA) Index. The IRCA index compares a given country’s export structure to the world export structure. The IRCA index is defined as:

$$(2)IRCA_{ij} = \frac{X_{ij} / X_{wj}}{\sum X_{ij} / \sum X_{wj}}$$

where $IRCA_{ij}$ is the index of revealed comparative advantage of country i in commodity j ; X_{ij} is country i ’s export of commodity j ; X_{wj} is world exports of commodity j ; $\sum X_i$ is total exports of country i ; and $\sum X_w$ is total world exports. The RCA of country i for product j is measured by the product share in the country’s exports relative to the share in world trade. For products in which the index is unity or greater, the country is deemed to have a comparative advantage; for products in which the index is less than unity, it may be determined that the country does not have a comparative advantage.²³

It is important to note, however, that the RCA index, as a measure of comparative advantage, does not discriminate between “inherent” comparative advantage and policy-induced comparative advantages. Any attempt to apply the concept of RCA to South Asian countries must therefore acknowledge the influence of distortions created by their policy regimes. As demonstrated by Pitigala *et al.* (2001), while trade barriers have been progressively reduced throughout South Asia, some significant barriers remain through the late 1990s,

²³ The RCA index as defined in equation 2, developed by Balassa (1965), has been employed by a number of policy related studies, including Yeats (1996) and Michealy (1995).

particularly in the case of India. Consequently, the true or “inherent” comparative advantage of South Asian countries may somewhat, are different than the following empirical results suggest.²⁴

Table 8 provides, for each of the South Asian countries, their import structure²⁵ and the corresponding RCAs of South Asian partners. A review of complementarity by each SAC’s major imports and partner’s comparative advantage does not seem encouraging for the potential success of the FTA. For example, India, the major market in the region, shows that its major imports can be identified mostly in semi-manufacturing (which is a consequence of its import policies) for which the rest of the region largely shows neither the capacity nor comparative advantage. This is reflected in the meager share of imports from the regional members on each item and the corresponding RCAs. India’s sugar imports (SITC 0612) reported a substantial (70 percent) share of its total imports from the region. However, sugar represents a mere 0.4 percent of India’s global imports. The prospects of the rest of the SACs substantially increasing their current low share of exports to India seems less promising based on their current trade structures. However, with sufficient reduction in India’s existing trade barriers—the new incentives bringing about an adjustment of resources among competing industries between India and its neighbors, enhancing current, as well as new capacities, its neighbors could make progress. In the meantime, prospects that may exist are confined to what are often termed “niche” markets (identified at HS 6-disaggregated level), which are unlikely to have a substantial impact on transforming their meager export shares with India unless quality and product features are compatible with those imported from elsewhere by India.

The statistics of the second largest economy, Pakistan, suggest a similar scenario. The region, which barely accounts for 2 percent share of Pakistan’s imports, overall demonstrates a negligible capacity to fulfill its import needs. The RCA indices show prospects that a limited portion of Pakistan’s import requirements

²⁴ Ideally, comparative advantage should be measured in an environment in which neither external trade constraints (like tariff and non-tariff barriers, or preferential access to export markets) distort an individual country’s “real” export structure, or where domestic market interventions (such as subsidies) in the exporting country have sector-specific effects or a general anti-export bias.

²⁵ The major 50 imports at SITC 4-digit level represent between 66 and 96 percent of total imports of South Asian countries. The product mix in 1998 is largely representative of latter 1990s. Readers must also note that the product differentiation within each of the SITC 4-digit classification (identified at Harmonized Classification 6-digit level) may provide part of an explanation for the apparent discrepancy between similar products that have successful global exports, but have no effectual intra-regional trade.

can be met by India, but are not reflected in formal export statistics due to the existing relationship with India.²⁶ Instead products, including textiles, machinery, apparel and foods, that fall under existing import restrictions are reflected in informal channels.²⁷

Bangladesh and Sri Lanka provide something of an exception to the above. Based on the complementarity of its imports and partner RCA indices, with products accounting for 37 percent of Bangladesh's and 34 percent of Sri Lanka's imports, the region appears to be an efficient supplier. Although a notable share is imported from India and Pakistan, it is nevertheless evident that a major share of the manufactured products (textile and other) essential for both Bangladesh's and Sri Lanka's export-oriented industries continues to originate from beyond the region. Similarly, a broad array of capital goods and raw material essential for their industrial development are imported from elsewhere.

In summary, only four of the 50 major products imported by Bangladesh have a regional import share of over 30 percent (in value), while nine of the major 50 imports of Sri Lanka show a regional import share of over 30 percent. On those occasions when the region, including India and Pakistan, has not been able to transfer its revealed comparative advantage to successfully export to Sri Lanka and Bangladesh, the reason may lie in the quality differentiation that Sri Lanka's export destinations demand. This implies that for a majority of its manufacturing needs, unless there is an adjustment of quality, Sri Lanka and Bangladesh may continue to rely heavily on sources beyond the region. Conversely, having demonstrated comparative advantages in products of interest to Sri Lanka and Bangladesh, the incentive that exists for India and Pakistan must be interpreted positively in terms of prospects of further trade between these members.

²⁶ Note that Pakistan maintains a restricted list of imports from India, which currently stands at 615 products, identified at the HS 6-digit level.

²⁷ See Pohit et al (2000).

Table 8: Major Imports of SACs and Respective RCA Indices of Partner Countries (1998)

Product Description	India							
	SITC	Trade Value (\$ '000)	Share in Total Imports	Share of Imports from SACs	RCA Indices			
					Pakistan	Bangladesh	Sri Lanka	Nepal
Gold, non-monetary	9710	4529173	10.7				0.0	
Diamonds, unworked, uncut or unmounted/unset	6672	3700920	8.7				2.5	
UN Special Code	9310	2757519	6.5	0.1	0.0	0.1	0.5	1.2
Palm oil	4242	1104500	2.6				0.0	
Inorganic acids and oxygen compounds	5222	889296	2.1		0.0		0.0	
Other coal, whether pulverized or not	3222	845534	2.0	0.0	0.0			
Silver, unwrought, unworked or semi-manufactured	6811	629853	1.5				0.0	
Fertilizers, n.e.s.	5629	427594	1.0		0.0		0.0	
Sawlogs and veneer logs	2472	339256	0.8	0.1	0.0		0.0	
Edible nuts (excl. nuts used for the extraction of oil)	0577	319112	0.8	1.6	0.2		25.5	
Mach. & appliances for particular specialized industries	7284	314472	0.7	0.1	0.1	0.4	0.0	
Mineral or chemical fertilizers, potassic	5623	303718	0.7				0.0	
Soya bean oil	4232	297114	0.7				0.0	
Parts of and accessories suitable for 751.2-,752--	7599	280184	0.7	0.1	0.0	0.0	1.0	
Other wheat (including spelt) and meslin, unmilled	0412	277163	0.7					0.2
Cyclic hydrocarbons	5112	275037	0.6					
Chemical products and preparations, n.e.s.	5989	270681	0.6	0.0	0.0		0.6	
Waste and scrap metal of iron or steel	2820	263271	0.6	1.8	0.0	0.0	0.8	
Newsprint	6411	254957	0.6				0.0	
Other non-ferrous base metal waste & scrap	2882	242340	0.6	0.7	0.3		0.2	
Other parts & accessories of motor vehicles	7849	240442	0.6	0.0	0.0	0.0	0.0	
Sunflower seed oil	4236	233912	0.6				0.0	
Gramophone records and similar sound recordings	8983	228039	0.5	0.0	0.0	0.0	0.0	0.0
Parts of apparatus of division 76---	7649	203091	0.5	0.0	0.0	0.0	0.1	
Electrical apparatus, e.g. switches, relays, fuses, plugs	7721	201889	0.5		0.0	0.0	0.2	
Natural calcium phosphates, natural aluminium c.phos.	2713	198333	0.5					
Other inorg. bases & metallic oxides hydroxides & perox.	5225	196028	0.5	4.8		1.0	0.0	
Other electrical machinery and equipment	7788	192484	0.5	0.1	0.0	0.0	0.1	
Beans, peas, lentils & other leguminous vegetables	0542	188687	0.4	3.8	0.2		0.0	105.5
Taps, cocks, valves etc. for pipes, tanks, vats etc.	7492	187435	0.4	0.0	0.0		0.0	
Antibiotics n.e.s. not incl. in 541.7	5413	184246	0.4		0.0		0.0	
Polyethylene	5831	183537	0.4	0.4	0.0		0.0	
Organic chemicals, n.e.s.	5169	181949	0.4	0.1	0.0		0.1	
Electronic microcircuits	7764	172708	0.4	0.0			0.0	
Ships, boats and other vessels	7932	161094	0.4		0.0	0.0	0.0	
Photographic film, plates, paper	8822	159358	0.4	0.0	0.0	0.0	0.0	
Refined sugars and other products of refined beet/cane	0612	159247	0.4	70.9	21.2		0.0	
Other soft fixed vegetable oils	4239	157859	0.4		0.0		0.1	
Weaving, knitting mach. for preparing yarns, parts	7245	155098	0.4		0.1		0.0	
Digital central storage units, separately consigned	7524	154536	0.4				0.0	
Other non-electric parts & accessories of machinery	7499	153353	0.4	0.0	0.0	0.0	0.0	
Transmission shafts, cranks, bearing housings etc.	7493	153350	0.4	0.0	0.0	0.0	0.0	
Medical instruments and appliances	8720	148094	0.3	0.0	3.3	0.0	0.0	
Sheets & plates, rolled >4.75mm of iron/steel	6744	144164	0.3	0.0			0.0	
Radiotelegraphic & radiotelephonic transmitters	7643	143939	0.3				0.0	
Machinery for extruding man-made textiles and parts	7244	139461	0.3	0.0	0.2		0.0	
Electrical measuring, checking, analyzing instruments	8748	136689	0.3		0.0		0.0	
Copper ores & concentrates;copper matte/cement	2871	135642	0.3					

Source: Calculated using UN COMTRADE Database

Notes: A value of 0.0 represents less than US\$100 in exports; blanks represent zero exports.

Pakistan								
Product Description	SITC	Trade Value (\$ '000)	Share in Total Imports	Share of Imports from SACs	RCA Indices			
					India	Bangladesh	Sri Lanka	Nepal
Palm oil	4242	726778	9.2	0.0	0.0		0.0	
Durum wheat, unmilled	0411	356516	4.5	0.0	0.0			
Tea	0741	246598	3.1	10.4	34.6	0.0	305.6	
Gold, non-monetary	9710	203606	2.6	0.0			0.0	
Fertilizers, n.e.s.	5629	200448	2.5	0.0	0.0		0.0	
Soya bean oil	4232	174441	2.2	0.0	0.0		0.0	
Passenger motor cars and for transport	7810	160903	2.0	0.1	0.1	0.0	0.0	
Polycarboxylic acids & their anhydrides etc.	5138	147012	1.9	1.4	1.3		0.0	
Medicaments(including veterinary)	5417	129158	1.6	1.2	1.6	0.0	0.0	
Other sheets and plates of iron or steel	6749	117869	1.5	0.8	0.5		0.0	
Cotton, not carded or combed	2631	117173	1.5	0.0	1.2	0.0	0.0	
Mach. & appliances for specialized ind.	7284	108260	1.4	0.0	0.3	0.0	0.0	0.0
Weaving, knitting mach. for preparing yarns	7245	105059	1.3	0.0	0.4		0.0	
Chemical products and preparations, n.e.s.	5989	103799	1.3	0.4	0.5		0.6	
Acyclic alcohols & their hal. derivatives	5121	96812	1.2	0.1	0.7	0.0	0.3	
Parts of apparatus of division 76---	7649	91209	1.1	0.1	0.0	0.0	0.1	
Ships, boats and vessels for breaking up	7933	81236	1.0	9.1	1.2		0.1	
Synthetic organic dyestuffs	5311	80214	1.0	14.6	5.9		0.0	1.5
Mach. for extruding man-made textiles & parts	7244	76747	1.0	0.1	1.0		0.0	
Polyethylene	5831	76432	1.0	0.1	0.1		0.0	
Parts of heading 792--,excl. tyres, engines	7929	69054	0.9	0.0	0.1		0.0	
Other nitrogen-function compounds	5148	67117	0.8	3.4	0.2		0.0	
Beans, peas, lentils & other vegetables	0542	66437	0.8	7.0	3.5		0.0	
Antibiotics n.e.s., not incl. in 541.7	5413	66397	0.8	4.2	3.2		0.0	
Insecticides packed for sale etc.	5911	65475	0.8	0.1	10.2	0.0	0.1	
Polypropylene	5832	63099	0.8	3.6	0.2		0.0	
Parts of the engines & motors of 714	7149	61682	0.8	0.0	0.0	0.0	0.0	
Electrical motors & generators, generating sets	7162	55570	0.7	0.0	0.2	0.0	0.0	
Other coal, whether or not pulverized	3222	54067	0.7	0.0	0.3			
Polyvinyl chloride	5834	53931	0.7	0.1	0.2	0.0	0.0	
Regenerated fibers suitable for spinning	2671	53801	0.7	2.0	0.2		0.0	
Motor vehicles for transport of goods/	7821	52159	0.7	0.0	0.1	0.0	0.0	
Machine plant & similar lab. equipment	7416	51664	0.7	0.0	0.2	0.0	0.0	
Wheeled tractors, not incl. in 744.11/783.2-	7224	48822	0.6	0.0	0.2		0.0	
Synthetic fibers not carded, combed	2665	44951	0.6	1.3	0.6		0.0	
Structures & parts of structures; iron/steel; plates	6911	44616	0.6	0.0	1.3		0.0	0.0
Electrical app. (switches, relays, fuses, plugs etc.)	7721	44611	0.6	0.0	0.2	0.0	0.2	
Mineral or chemical fertilizers, nitrogenous	5621	44419	0.6	0.0	0.1	0.0	0.0	
Tinned sheets and plates, of steel	6747	43542	0.5	0.9	4.9		0.1	
Other parts & accessories of motor vehicles	7849	43273	0.5	0.1	0.2	0.0	0.0	105.5
Cyclic hydrocarbons	5112	42935	0.5	0.3	0.1			
Parts of and accessories suitable for 751.2-	7599	42698	0.5	0.1	0.1	0.0	1.0	
Other tyres, tyre cases, inner tubes	6259	40622	0.5	7.8	1.1		18.2	
Engines & motors, such as water turbines etc.	7188	40298	0.5	0.0	0.1		0.0	
Iron ore agglomerates (sinters, pellets etc)	2816	40079	0.5	37.4	2.2			
Other non-electric parts & accessories of machines	7499	13017	0.2	1.8	0.5	0.0	0.0	

Source: Calculated using UN COMTRADE Database

Notes: A value of 0.0 represents less than US\$100 in exports; blanks represent zero exports..

Bangladesh								
Product Description	SITC	Total Imports (\$ '000)	Share of Imports	Share of Imports from SACs	RCA Indices			
					India	Pakistan	Sri Lanka	Nepal
Cotton fabrics, woven, bleached, dyed, printed	6522	412120	6.0	18.8	5.3	28.6	1.3	0.1
Sheets & plates, rolled; thickness of < 3mm.	6746	279166	4.1	9.5	0.1	0.0	0.0	
Portland cement,ciment fondu,slag cement .	6612	240975	3.5	28.0	1.3	0.3	0.0	
Cotton not carded or combed	2631	236638	3.5	13.0	1.2	6.1	0.0	
Gas oils	3343	234729	3.4	0.0	0.0			
Cotton yarn	6513	219585	3.2	97.0	24.9	92.6	1.6	
Rice semi-milled or wholly milled,	0422	202754	3.0	98.3	31.7	47.7	0.1	8.3
Ships, boats and other vessels for breaking up	7933	193570	2.8	0.0	1.2		0.1	
Fabrics, woven of synthetic textile materials	6531	185025	2.7	0.9	1.9	24.0	0.4	
Petroleum oils & crude oils .from bitumin. minerals	3330	177017	2.6	0.0	0.0	0.2		
Fabrics, woven, of synthetic fibers	6534	171556	2.5	0.8	3.5	0.0	0.5	
Other wheat and meslin, unmilled	0412	142350	2.1	1.0	0.0		0.3	0.4
Yarn of discontinued synthetic fibers, contain< 85%	6516	138184	2.0	6.6	5.3	6.0	1.7	
Soya bean oil	4232	125396	1.8	0.0	0.0		0.0	
Metal cutting machine-tools	7361	117912	1.7	2.0	0.3	0.0	0.0	
Knitted/crocheted fabrics of fibers	6552	94234	1.4	14.3	0.4	4.1	1.4	
Palm oil	4242	90050	1.3	0.0	0.0		0.0	
Cotton fabrics, woven, unbleached,	6521	76832	1.1	18.1	16.4	70.9	5.3	
Raw silk (not thrown)	2613	65092	1.0	0.3	0.5			
Passenger motor cars & goods transport	7810	64038	0.9	1.0	0.1	0.0	0.0	
Fabrics, woven containing 85% of synthetic fibers	6532	63701	0.9	0.6	2.1	0.0	6.0	
Beans, peas, lentils & other vegetables	0542	59204	0.9	15.7	3.5	0.2	0.0	211.1
Kerosene and other medium oils	3342	58514	0.9	1.6	0.0			
Rape and colza seeds	2226	57542	0.8	0.0	0.0			
Milk & cream, preserved, concentrated or sweetened	0224	57323	0.8	4.9	0.0	0.1	0.0	
Mach.& appliances for specialized industries	7284	55884	0.8	8.4	0.3	0.1	0.0	
Shirts, men's, of textile fabrics	8441	55269	0.8	0.3	10.0	7.4	15.4	138.3
Radiotelegraphic & radiotelephonic transmitters	7643	48922	0.7	0.1	0.0		0.0	
Machinery for extruding man-made textiles	7244	48309	0.7	18.6	1.0	0.2	0.0	
Yarn contain.85% by weight of synthetic fibers	6514	47564	0.7	11.5	0.9	2.7	0.6	0.0
Small-wares and toilet articles etc.	8998	47475	0.7	0.2	0.4	0.0	0.2	1.5
Rice in the husk or husked,	0421	43399	0.6	91.1	0.0			
Sugars, beet and cane, raw, solid	0611	42381	0.6	0.0	0.1	0.0	0.0	
Parts of the machine-tools of 736--	7369	40741	0.6	0.0	0.8	0.0	0.0	
Newsprint	6411	38390	0.6	0.2	0.0		0.0	
Zinc and zinc alloys, unwrought	6861	37440	0.5	0.8	0.2	0.0		
Electrical motors & generators, generating sets	7162	37313	0.5	1.3	0.2	0.0	0.0	
Mineral or chemical fertilizers, nitrogenous	5621	37272	0.5	27.5	0.1		0.0	
Sewing machines, furniture for	7243	34927	0.5	0.5	0.2	0.0	0.1	
Weaving, knitting machines for preparing yarns	7245	34321	0.5	7.8	0.4	0.1	0.0	
Mineral or chemical fertilizers, phosphates	5622	33535	0.5	0.0	1.5		0.0	
Other tubes and pipes, of iron or steel	6783	32503	0.5	4.1	1.1	0.1	0.0	
Polyethylene	5831	32308	0.5	0.5	0.1	0.0	0.0	
Miscellaneous articles of materials of div.58	8939	32298	0.5	2.5	0.3	0.2	0.2	0.0
Paper and paperboard in rolls or sheets	6415	31815	0.5	24.7	0.2	0.0	0.0	
Synthetic organic dyestuffs	5311	30951	0.5	43.7	5.9	0.0	0.0	
Aluminium and aluminium alloys	6841	30042	0.4	79.6	0.4	0.0		
Polyvinyl chloride	5834	29616	0.4	1.0	0.2	0.0	0.0	
Tulle, lace, embroidery, ribbons	6560	29494	0.4	1.5	1.7	1.0	2.1	

Source: Calculated using UN COMTRADE Database

Notes: A value of 0.0 represents less than US\$100 in exports; blanks represent zero exports.

Sri Lanka					
Product Description	SITC	Total	Share of	Share of	RCA Indices

		Imports (\$ '000)	Imports	Imports from SACs	India	Pakistan	Bangla- desh	Nepal
Knitted/crocheted fabrics of fibers other than synthetic	6552	275888	5.3	1.8	0.4	4.1	0.4	
Cotton fabrics, woven, bleached, mercerized, dyed, printed	6522	253501	4.9	12.5	19.8	105.8	14.1	0.1
Fabrics, woven containing 85% of discontinuous synth. fibers	6532	152080	2.9	1.8	2.1	0.0	0.0	
Motor vehicles for transport of goods/materials	7821	137146	2.6	4.6	0.1	0.0	0.0	
Diamonds, unworked, uncut/or worked but not mounted/set	6672	135765	2.6	1.5	24.0			
Passenger motor cars, for transport of passengers & goods	7810	127539	2.4	14.8	0.1	0.0	0.0	
Durum wheat, unmilled	0411	113227	2.2	0.0	0.0	0.6		
Coated/impregnated textile fabrics & products n.e.s.	6573	102573	2.0	1.4	18.6	0.4	0.4	
Milk & cream, preserved, concentrated or sweetened	0224	101782	2.0	0.0	0.0	0.1		
Fabrics, woven, of discontinuous synthetic fibers	6534	96270	1.8	7.9	3.5	0.0	5.2	
Cotton fabrics, woven, unbleached, not mercerized	6521	87422	1.7	20.2	19.4		0.2	
Tulle, lace, embroidery, ribbons, & other small wares	6560	83694	1.6	1.2	1.7	1.0	0.0	
Refined sugars and other products of refined beet/cane	0612	72519	1.4	0.4	0.0	21.2		
Portland cement,ciment fondu,slag cement etc.	6612	67511	1.3	4.0	1.3	0.3		
Elect. line telephonic & telegraphic apparatus	7641	67231	1.3	2.6	0.0	0.0		
Parts of and accessories suitable for 751.2-,752--	7599	63963	1.2	0.2	0.1	0.0	0.0	
Small-wares and toilet articles, feather dusters etc.	8998	62076	1.2	1.3	0.4	0.0	0.1	0.7
Medicaments(including veterinary medicaments)	5417	58363	1.1	44.3	1.6		0.0	
Cotton yarn	6513	56237	1.1	52.2			0.0	
Beans, peas, lentils & other leguminous vegetables	0542	53006	1.0	59.1	3.5	0.2		105.5
Palm oil	4242	46998	0.9	0.7	0.0	0.0		
Tobacco, not stripped	1211	45782	0.9	3.4	10.4	0.9	1.0	
Rice semi-milled or wholly milled, broken rice	0422	45764	0.9	86.9	31.7	47.7	0.0	4.1
Fabrics, woven of continuous synthetic textile materials	6531	43866	0.8	0.2	1.9	24.0	0.0	
Mineral or chemical fertilizers, nitrogenous	5621	42720	0.8	0.0	0.1		10.0	
Yarn containing 85% by weight of synthetic fibers, not for sale	6514	42706	0.8	5.2	0.9	2.7	0.0	0.0
Miscellaneous articles of materials of div.58	8939	41534	0.8	2.3	0.3	0.2	0.0	0.0
Electrical apparatus, e.g. switches, relays, fuses, plugs etc.	7721	40803	0.8	10.8	0.2	0.0	0.0	
Sewing machines, furniture for sewing machines & parts	7243	38072	0.7	1.1	0.2	0.0		
Paper and paperboard, in rolls or sheets, n.e.s.	6415	36342	0.7	34.9	24.9	92.6	0.0	
Fish, dried, salted or in brine; smoked fish	0350	35290	0.7	61.0	0.3	3.1	3.1	
Polyethylene	5831	34914	0.7	3.1	0.0			
Sugars, beet and cane, raw, solid	0611	33520	0.6	0.0	0.1	0.0		
Radiotelegraphic & radiotelephonic transmitters	7643	30808	0.6	0.0	0.0			
Other fresh or chilled vegetables	0545	30368	0.6	78.8	1.1	0.9	1.6	0.0
Fabrics, woven containing 85% discontinuous regen. fibers	6536	29718	0.6	0.7	0.5			
Public-service type passenger motor vehicles etc.	7831	29345	0.6	59.7	1.4	0.0		
Insulated, electrical wire, cable, bars, strips etc.	7731	28597	0.5	4.1	0.1	0.0		
Motorcycles, auto-cycles and cycles with an auxiliary motor	7851	27863	0.5	14.7	0.9	0.1	0.0	
Machinery & appliances for specialized particular industries	7284	27611	0.5	12.8	0.3	0.1	0.4	
Blooms, billets, slabs & sheet bars of iron or steel	6725	26627	0.5	9.1	0.3	0.0		
Gold, non-monetary	9710	26468	0.5					
Printing paper & writing paper, in rolls or sheets	6412	26318	0.5	7.5	0.1			
Television receivers, colour	7611	24211	0.5	4.0	0.1	0.0		
Other parts & accessories of motor vehicles	7849	22796	0.4	28.6	0.2	0.0	0.0	
Potatoes, fresh or chilled, excluding sweet potatoes	0541	22249	0.4	89.6	0.1	4.7		
Parts of apparatus of division 76---	7649	22235	0.4	0.5	0.0	0.0	0.0	
Kraft paper and paperboard, in rolls or sheets	6413	22040	0.4	6.2	0.2	0.0		

N Source: Calculated using UN COMTRADE Database

Notes: A value of 0.0 represents less than US\$100 in exports; blanks represent zero exports.

Nepal								
Product Description	SITC	Total Imports (\$ '000)	Share of Imports	Share of Imports from SACs	RCA indices			
					India	Pakistan	Bangladesh	Sri Lanka
Gold, non-monetary	9710	250335	32.9	0.0				0
UN Special Code	9310	77805	10.2	1.3	0.8	0.0	0.1	0.9
Edible nuts (excluding nuts used for the extraction of oil)	577	26658	3.5	4.8	16.5	0.2		50.7
Sheep's or lambs' wool, greasy or fleece-washed	2681	22601	3	0	0.1	0.0		
Passenger motor cars, transporting passengers & goods	7810	22871	3	0.5	0.1	0.0	0.0	0.0
Aircraft not exceeding an unladen weight 15000 kg	7923	20345	2.7	0				0.4
Raw silk (not thrown)	2613	19693	2.6	0	0.5			
Other polymerization and copolymerization products	5839	19527	2.6	0.1	0.2	0.0	0.0	0.0
Electrical line telephonic & telegraphic apparatus	7641	19483	2.6	0.0	0.0	0		0.0
Mineral or chemical fertilizers, nitrogenous	5621	17136	2.2	16.3	0.1		10	0.0
Soya bean oil	4232	14456	1.9	0	0			0.0
Spices (except pepper and pimento)	752	12427	1.6	0	16.8	8.5	0.0	156.8
Electro-medical apparatus	7741	10709	1.4	0.4	0.1			0.0
Fabrics, woven of continuous synthetic textile materials	6531	9082	1.2	0.1	1.9	24	0.0	0.7
Cotton yarn	6513	8485	1.1	0.0	24.9	92.6	0.0	2.6
Refractory bricks & other refractory construction materials	6623	8746	1.1	0.0	0.6	0.0	0.0	0.3
Ball, roller or needle roller bearings	7491	8085	1.1	0.0	0.5	0.0		0.00
Other electrical machinery and equipment	7788	8459	1.1	0.1				
Other prepared or preserved meat	149	7462	1	0.4	0.0	0.0		0.0
Printed matter, n.e.s.	8928	7337	1	1.5	0.1		0.0	0.7
Other non-ferrous base metal, n.e.s.	2882	6831	0.9	0	0.1	0.3		0.3
Palm oil	4242	6548	0.9	0	0			0.0
Lifting, handling, loading machinery. conveyors	7442	6917	0.9	0.1	0.1	0.0	0.1	0.0
Analogue & hybrid data processing machines	7521	7238	0.9	0.4	0			0.2
Photographic, cameras, parts & accessories	8811	6379	0.8	0	0		0	0.0
Cotton fabrics, woven, unbleached, not mercerized	6521	5353	0.7	52.5	16.4	70.9	0.2	9.6
Public-service type passenger motor vehicles etc.	7831	5358	0.7	5.1	1.4	0		0.0
Medicaments (including veterinary medicaments)	5417	4229	0.6	2.6	1.6	0.3	0	0.0
Office machines, n.e.s.	7518	4575	0.6	0	0		0	0.0
Aldehyde-, ketone- & quinone-function compounds	5162	3523	0.5	2.7	1.8			0.0
Zinc and zinc alloys, unwrought	6861	4055	0.5	0	0.2	0.0		
Electrical measuring, checking, analysing instruments	8748	3565	0.5	0.6	0.1	0.0		
Armored fighting vehicles, arms of war & ammunition	9510	4000	0.5	0	0	0.0		0.0
Meal and flour of wheat and flour of meslin	460	2940	0.4	81.3	0.1			0.0
Waste and scrap metal of iron or steel	2820	2999	0.4	0.0	0.0	0.0	0.0	1.5
Television receivers, color	7611	3392	0.4	0.1	0.1	0.0		0.0
Radio-broadcast receivers portable, incl. sound recording	7622	2766	0.4	0.1	0			0.0
Footwear	8510	3289	0.4	2.6	1.6	0.7	1.2	0.1
Watches, watch movements and cases	8851	2822	0.4	0	0.2	0.0		0.0
Oil seeds and oleaginous fruit, n.e.s.	2238	2477	0.3	72.3	7.4	17.1		0.1
Coconut (copra) oil	4243	1969	0.3	0	0.2			7.3
Perfumery, cosmetics and toilet preparations	5530	2516	0.3	0.1	0.7	0.1	0.0	0.1
Fabrics, woven, of silk, of noil or other waste silk	6541	2662	0.3	0	16.8	0.2		0.1
Copper and copper alloys, worked	6822	2242	0.3	0	0.2	0.0		0.0
Electrical motors & generators, generating sets	7162	2489	0.3	0.4	0.2	0.0	0.0	0.0
Household type refrigerators & food freezers	7752	2543	0.3	0.0	0.1	0.0		0.0
Batteries and accumulators and parts	7781	2558	0.3	0.0	0.3	0.0	0.00	0.1
Lighting fixtures and fittings and parts	8124	2653	0.3	0.0	0.1	0.0	1.1	4.6
Miscellaneous articles of materials of div.58	8939	2549	0.3	0.0	0.3	0.2	0	0.4
Hygienic and pharmaceutical articles of rubber	6281	1885	0.2	0.0	5.6	0.2	0	4.1

Source: Calculated using UN COMTRADE Database

Notes: A value of 0.0 represents less than US\$100 in exports; blanks represent zero exports.

The extent of the disparity between imports and products representing an RCA index less than unity among its regional partners is the highest for Nepal. Nepal's 50 major imports represent 92 percent of Nepal's total imports (by value); for over 70 percent of these products the regional members show an RCA less than one, suggesting the extent to which the region is lacking in "efficiency" to meet Nepal's import needs.

As seen from the above, the evidence for a successful regional bloc based on complementarities in comparative advantage is rather mixed. Bangladesh and, to some extent, Sri Lanka can look to the region to meet some of their import needs, which are met mostly by India and to a limited extent by Pakistan. The extent to which the rest of the region meets the import needs based on the current specializations may be a critical obstacle to the successful implementation of the FTA. The prospects of enhancing regional trade hinges upon the extent to which smaller countries can increase exports to India and vice versa, appears to be narrow. A second crucial feature that emerges from Table 7 is that, among those products for which South Asia appears to be an efficient supplier ($RCA > 1$), the regional members have tended to import an insignificant share from other regional countries, suggesting that product differentiation (quality, durability) and prospects for intra-industry trade remain low. It is unlikely that the FTA would have any impact, as these export-oriented imports are already duty-free, including textile products that countries like Sri Lanka and Bangladesh heavily rely on for their apparel exports. Therefore (except for exchange rate and other indirect effects) there would be little effect on imports (including imports from other South Asian countries) with preferential or free trade agreements.

On the other hand, it must be noted that, up to and including the latest data year analyzed (1998), India implemented very extensive quantitative restrictions, which for most manufactured consumer goods and some primary commodities amounted to an import ban. As a result, many of these products were not being imported at all or in small quantities, either from ROW or from the other South Asian countries. Consequently, these products are not picked up in the current analysis of recent trade patterns, even though it is likely that at least some of them, in the absence of quantitative restrictions, would have been exported from the other South Asian countries to India. The impact of such restrictions must be recognized in drawing conclusions in the succeeding analyses.

Complementarity Test

An additional summary measure that can test complementarity among members of a prospective FTA is the “complementarity index,” which tests how well structures of imports and exports match. The complementarity index test offers a different dimension of complementarity, taking into account the closeness of a country's commodity trade structure relative to the world trade structure and their import and export specialization.²⁸ The index ranges from zero (when none of the goods exported matches with imports of the other countries) to 100 (when export shares perfectly correspond with imports).²⁹ Proponents of the index, such as Michael (1994) and Yeats (1998), argue that the higher its value, the more likely a proposed regional trade arrangement will succeed. An increasing tendency of the index between two members can also provide some indication of the likelihood of their further integration. The complementarity index is defined as follows:

$$(3) ITC_{ij} = \sum_k \frac{X_{iw}^k}{X_{iw}} * \frac{M_{ww}^k - M_{iw}^k}{M_{ww}^k - M_{iw}^k} * \frac{M_{jw}^k}{M_{jw}}$$

The index of complementarity in country i 's exports to country j is the weighted sum of the products of each commodity's share in country i 's exports and in country j 's imports, with commodities weighted by the inverse of their shares in world trade. The weighting is necessary because country j is more likely to buy commodity k from country i if other countries are simply not exporting much of commodity k .³⁰

The observed pattern of low complementarities is consistent with the trade complementarity indices reported in Table 9. The measured degree of complementarity among countries is very low. There are some notable exceptions, such as the indices between of Sri Lanka and Pakistan, where both have experienced a

²⁸ Drysdale (1967) developed the index to separate out the impact of the commodity composition of countries' trade complementarity from other factors.

²⁹ The index has some limitations that should be noted. First it takes the existing structure (share) of exports as given and attempts to determine how well it matches a potential partner's imports. This assumes that either existing exports will be diverted to the regional partner, or the country can expand these exports at constant costs. Furthermore, the index treats all exports as equal, yet some may have very different associated national policy objectives. Finally, the impact of distance and transport costs are neglected in the complementarity index.

³⁰ Yeats (1998) points out that the index has its limitations. Yeats noted that it “takes the existing structure (share) of exports as a given and attempts to determine how well it matches a potential partner's imports. This assumes that either existing exports will be diverted to the regional partner, or the country can expand these exports at constant costs. Also, the approach assumes there is something optimal about the existing structure of trade. This need not be the case. Third, the complementarity index treats all exports as equals, yet some may have very different associated national policy objectives. Fourth, the influence of distance and transport costs are neglected in the complementarity index.”

steady increase in complementarity over the selected years. A slight increase in export complementarity is also evident between India and Bangladesh, but, to a lower extent than those between Sri Lanka and Pakistan. Are these encouraging in terms of achieving SAFTA? To address this question we compare complementarity indexes for a set of sample regions, at the inception of their respective regional trade agreements. Table 9 also provide indices of more successful arrangements, such as the European Union, the North American Free Trade Agreement, and Mercosur: in this context the prospects do not seem very promising for South Asia. The high complementarity ratios suggest comparable import and export structures among member countries in those regions.

Table 9: Trade Complementarity Index of Major South Asian Countries

Importing Country	Exporting Country				
		Bangladesh	India	Pakistan	Sri Lanka
India	1975	0.04	-	0.16	0.10
	1980	0.04	-	0.23	0.70
	1990	0.19	-	0.34	1.04
	1995	0.18	-	0.50	0.17
	1997	0.47	-	0.42	-
	1998	1.59	-	0.37	0.76
Pakistan	1975	0.12	0.07	-	1.07
	1980	0.98	0.07	-	6.89
	1990	0.16	0.39	-	8.11
	1995	0.23	0.83	-	4.91
	1997	0.52	1.45	-	-
	1998	2.51	1.55	-	8.17
Bangladesh	1975	-	0.43	4.48	0.10
	1980	-	1.13	3.68	0.24
	1990	-	1.2	3.23	0.36
	1997	-	4.12	0.54	-
	1998	-	3.21	8.25	1.05
Sri Lanka	1975	0.33	0.64	12.02	-
	1980	0.12	1.24	2.63	-
	1990	1.18	1.64	2.81	-
	1995	0.39	1.98	-	-
	1998	0.97	2.65	4.12	-
Nepal	1998		1.28		1.75
South Asia		1.3	MERCOSUR		28.6
European Community		53.4	Canada-USA FTA		64.3
NAFTA		56.3	LAFTA		22.3
Andean Pact		7.4			

Notes: Data are presented column-wise (i.e. Figures show trade complementarity of country listed in column 1 with each country listed in row 1).

Sources: Calculated from the WITS Database, World Bank. Each country index is derived by computing the complete schedule of exports at SITC 4-digit level .

The complementarity Index for other regions EU, NAFTA, Mercosur, LAFTA, and Andean Pact is obtained from Yeats (1998).

The measures for the Andean Pact were an exception among these groups. They were low enough to suggest that imports and exports between the member countries were largely similar and may have contributed to its failure (Yeats, 1998). The weighted average of the complementarity index for South Asia does not compare well even with the Andean Pact. The underlying “mismatch” between the import and export structures for most members in South Asia implies that South Asia will continue to rely on non-regional

sources for its key imports for facilitating industrialization and growth, and will continue to rely on non-regional markets to absorb its major exports. This limitation will generally restrict the potential impact of regional trade arrangements among South Asian countries.

Are South Asian Countries in Competition with Each Other?

While low complementarities raise concerns about the capacity of existing industrial and agricultural structures in South Asian countries to support greater regional trade integration, the interpretation on the flip-side is that their export structures are highly ‘competitive’. The empirical evidence suggests that this is a negative attribute for the formation of a successful FTA.³¹ Theory suggests that the higher the difference in factor endowments, demonstrated by comparative advantages, the greater are the prospects for trade among partners.³² This implies that, in principle, countries with different RCA profiles have more opportunities to trade with one another than those with similar RCA profiles.³³ This section attempts to complement the section above by examining more closely the degree of similarity between the members of the South Asian countries, comparing their trade and comparative advantages.

Table 10 presents a summary tabulation based on descriptive statistics in annex Table A4, which highlights the top 50 exports of selected South Asian countries in 1998 and their respective RCA profiles.³⁴ The ratio in Table 10 demonstrates that SACs (with the exception of India) are significantly competitive with each other in their exports. For example, nearly 90 percent of Bangladesh’s exports are similar to those of at least one or more regional trading partners. Pakistan’s exports closely follow with an 83 percent share in competition with another member. The shares for Sri Lanka and Nepal are 77.1 percent and 73.9 percent, which sums up the extent to which these four members are competing with each other in third markets.

Table 10: Competition Summary

³¹ De Melo *et al.* (1993).

³² Yeats (1998).

³³ RCA indices may also indicate the robustness of the product being exported. Products with strong RCA indices are likely to be continued exports than those with weaker RCAs.

³⁴ The top 50 exports were chosen as they account for between 62 percent (India) and 98 percent (Bangladesh) of SAARC members; therefore, they are sufficient to deduce reasonable conclusions. Note that the top 50 exports constitute a substantial share of SACs total exports.

	India	Pakistan	Bangladesh	Sri Lanka	Nepal
Share of Total Exports Representing Top 50 Products	62.5	99.0	98.0	90.0	80.0
Share of Competing Products in Total Exports*	32.1	82.7	89.8	77.1	73.9
Share of Competing Products with RCA >1	29.7	82.3	89.6	75.7	73.8

Notes: *The number products exported at SITC 4-digit level matching the exports of at least one regional trading partner, as a share of total exports.

Source: WITS and SIMA databases, World Bank.

When comparison is made between those products in which $RCA > 1$, the conclusion above remain unchanged. More than 89 percent of Bangladesh's globally competitive exports coincide with those of at least one regional partner. The extent of competition among Nepal, Pakistan, and Sri Lanka is marginally lower than that of Bangladesh. This characteristic in export profiles underscores the extent of complexity involved in creating an environment that encourages regional competition for those products with global efficiency. Only India offers any noteworthy share of efficient exports that are dissimilar to others in the region, and therefore offers the prospects for significantly expanding regional trade.

The lack of complementarity and high degree of competition in export structures imply daunting prospects for expanding regional trade in South Asia. It seems that general liberalization efforts, which helped countries to increase efficiency, have evolved among a narrow range of products largely dominated by textiles and apparel. Ironically, these are precisely the products for which the countries have demonstrated a reluctance to totally dismantle existing trade barriers. For instance, competition between Bangladesh, Pakistan and Sri Lanka seems to emerge primarily in textiles and apparel exports, which occupy the major share in each of their comparative advantages.³⁵ With the exception of its FTA agreement with Sri Lanka, through which India provides market access through quotas, India nevertheless remains vehemently opposed to liberalization of textiles and apparel under any of its regional agreements.

³⁵ Note, however, that product differentiation can provide for complementarities even in textile and apparel., paving the way for mutually beneficial trade. This can only be established at a further disaggregation, for example at HS 6-digit level, which is beyond the scope of the current study.

III. Conclusion

The above analysis, using various definitions of the “natural trading partner” hypothesis, demonstrates that the South Asian countries can be characterized only moderately as “natural trading partners”. Additional statistical measures evaluating the evolving trade patterns among SACs point to further obstacles to a rapid increase in intra-regional trade. The evidence is as follows:

First, the “volume of trade” criterion for “natural trading partners” (Lipsey, 1960; Summers, 1990) suggests that the South Asian countries fall short of this characterization. Bhutan and Nepal—which, by virtue of being landlocked and smaller in size, maintain strong trade links with India—are exceptions to the overall low shares of intra-regional trade. None of the other countries trade “disproportionately” within the region.

The evidence of South Asia’s recent trade patterns also does not strongly support another version of the hypothesis that characterizes “natural trading partners” on the basis of geographical proximity (Wonnacott and Lutz, 1989; Deardorff and Stern, 1994). The countries of the South Asian region have, instead, demonstrated an increasing tendency to trade relatively intensively with partners *outside* the region, due to either pure endowment differences—that is, vis-à-vis industrial countries—or due to long-standing cultural, ethnic, and/or religious affiliations.

In terms of “trade complementarity”—a third criterion of the natural trading partner hypothesis (Schiff, 1999; Michaely, 1996)—the evidence on South Asia is mixed. India’s, and to a limited extent Pakistan’s, more efficient exports (defined by RCA indices greater than one) complement the import demands of a number of countries in the region, particularly those of Bangladesh and Sri Lanka. However, the other South Asian countries display efficiencies in only a limited range of products that can fulfill India’s or any other regional members’ major import requirements.

Mirroring the lack of *complementarity* among the members’ trade patterns is the highly *competing* nature of their trade. Except for India, most of the countries in the region are competitors in their export

markets in a narrow range of products—dominated by textile and apparel exports—which may further inhibit the prospects of increasing regional trade to the level envisioned under SAFTA.

The evidence suggests that the products for which the region demonstrates strong comparative advantages are predominantly labor-intensive manufactured goods. There is limited evidence that the rise in intra-regional trade has provided opportunities for these most dynamic exports, for which the South Asian countries appear to be competing against each other in third markets. It should be noted, however, that up to and including the latest data year analyzed (1998), India implemented very extensive quantitative restrictions, which for most manufactured consumer goods and some primary commodities amounted to an import ban. As a result, many of these products were not being imported at all or in small quantities, either from ROW or from the other South Asian countries. Consequently, these products are not picked up in the various indices, especially the complementary indices, even though it is likely that at least some of them would have been exported from the other South Asian countries to India in the absence of such restrictions.

At the same time, the evidence here is consistent with empirical evidence from other developing countries that suggests that more dynamic exporters tend to rely less on other developing country markets.³⁶ In effect, South Asia's trade patterns tend to support the Heckscher-Ohlin model of trade for developing countries. Therefore, it is plausible to assume that the highest gains are likely to continue to accrue in those sectors and markets for which South Asia has a high differential in factor endowments, i.e. vis-à-vis industrial countries.

While this static analysis, based on recently evolving trade patterns, points to trade structures that may hinder the rapid, successful implementation of SAFTA, there is evidence that unilateral, non-discriminatory trade liberalization has already helped the South Asian countries to refine their incentive environments by reducing distortions and has helped to enhance the region's competitiveness in manufactured exports.³⁷ Continuing on the process of unilateral liberalization would be more likely to mitigate any welfare decreasing

³⁶ Havrylyshyn (1987).

³⁷ Atukorala (1999), IMF (1995).

effects that a preferential trade arrangement may induce through trade diversion.³⁸ More importantly, continuing unilateral/multilateral liberalization would likely help South Asia to further diversify and evolve new comparative advantages and complementarities, thus, creating the requisite environment for the successful implementation of SAFTA.

³⁸ Panagariya (2001) demonstrates how preferential liberalization in South Asia involves substantial trade diversions.

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Annex Table A1: Regional Trade as Share of Total Trade in South Asia

Country	Trading Partner	Exports				Imports			
		1981	1990	1995	1998	1981	1990	1995	1998
India	Bangladesh	0.72	1.67	3.14	2.83	0.09	0.06	0.23	0.15
	Bhutan	0.00	0.00	0.04	0.03	0.00	0.00	0.05	0.03
	Maldives	0.01	0.03	0.04	0.02	0.00	0.00	0.00	0.00
	Nepal	1.16	0.22	0.35	0.88	0.31	0.06	0.08	0.34
	Pakistan	0.05	0.24	0.23	0.37	0.53	0.19	0.11	0.50
	Sri Lanka	0.96	0.57	1.26	1.46	0.38	0.09	0.11	0.10
	As share of Total	2.89	2.73	5.06	5.59	1.31	0.41	0.58	1.13
Pakistan	Bangladesh	2.07	1.84	1.92	1.26	0.91	0.52	0.31	0.39
	Bhutan	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00
	India	2.34	0.88	0.49	2.40	0.05	0.62	0.70	1.65
	Maldives	0.01	0.01	0.02	0.02	0.01	0.00	0.00	0.00
	Nepal	0.00	0.02	0.04	0.09	0.04	0.01	0.00	0.01
	Sri Lanka	1.07	1.23	0.69	1.13	0.88	0.50	0.43	0.37
	As share of Total	5.49	3.98	3.16	4.91	1.89	1.65	1.47	2.43
Bangladesh	Bhutan	0.00	0.01	0.01	0.01	0.00	0.20	0.06	0.07
	India	2.56	1.30	1.14	1.44	2.41	4.66	15.30	16.12
	Maldives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Nepal	0.03	0.44	0.32	0.47	0.44	0.04	0.06	0.20
	Pakistan	5.34	1.39	0.85	0.75	1.75	1.92	2.12	1.00
	Sri Lanka	0.34	0.49	0.37	0.03	0.08	0.22	0.17	0.09
	As share of Total	8.26	3.63	2.69	2.70	4.68	7.04	17.71	17.48
Sri Lanka	Bangladesh	0.26	0.52	0.31	0.13	0.13	0.34	0.13	0.02
	India	2.94	1.07	0.84	1.04	4.02	4.48	9.84	9.95
	Maldives	0.19	0.39	0.37	0.65	0.11	0.24	0.36	0.27
	Nepal	0.00	0.00	0.00	0.05	0.00	0.00	0.02	0.09
	As share of Total	8.81	3.69	2.65	2.58	5.19	6.98	11.43	11.97
Nepal	Bangladesh	12.82	0.30	1.09	2.16	0.11	2.59	1.46	0.41
	India	48.60	7.00	7.71	32.80	40.84	9.98	15.65	30.67
	Pakistan	2.40	0.31	0.14	0.18	0.04	0.37	0.43	0.43
	Sri Lanka		0.05	0.28	1.10	0.01	0.47	0.00	0.15
	As share of Total	63.82	7.66	9.23	36.25	41.00	13.40	17.55	31.67
Maldives	Bangladesh	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00
	India	0.00	0.05	0.11	0.18	0.00	0.00	0.00	0.00
	Pakistan	0.32	0.00	0.00	0.11	0.20	0.66	0.74	1.98
	Sri Lanka	1.83	7.24	11.16	15.55	2.15	9.55	15.31	31.35
	As share of Total	2.15	7.29	11.27	17.02	2.35	10.21	16.05	33.33

Source: IMF Direction of Trade Statistics.

Annex Table A2: Nominal Intra-regional Trade (1981–98), in current US\$

Country	Sub-series	Intra-regional Exports				Intra-regional Imports			
		1981	1990	1995	1998	1981	1990	1995	1998
India	Bangladesh	49.0	297.1	959.6	1038.2	13.6	15.3	78.8	64.8
	Bhutan	0.0	0.0	11.7	11.8	0.0	0.0	16.4	14.9
	Maldives	0.6	4.7	12.5	6.7	0.0	0.0	0.1	0.2
	Nepal	79.5	39.5	107.1	323.6	44.5	15.1	27.5	147.2
	Pakistan	3.1	43.5	70.4	136.8	76.7	44.9	37.4	217.2
	Sri Lanka	65.2	101.5	383.4	533.9	55.5	22.0	38.9	44.7
	Total	197.4	486.4	1544.7	2051.0	190.3	97.3	199.1	489.0
Pakistan	Bangladesh	59.6	102.8	153.4	106.6	51.3	38.2	35.0	36.4
	Bhutan	0.0	0.2	1.0	0.1	0.0	0.5	2.3	0.2
	India	67.4	49.0	38.8	202.6	2.8	45.7	80.6	153.9
	Maldives	0.2	0.6	1.4	1.8	0.4	0.0	0.2	0.1
	Nepal	0.1	1.1	3.0	7.6	2.2	0.4	0.5	1.3
	Sri Lanka	30.7	68.9	55.1	95.1	49.6	37.0	49.6	34.4
	Total	158.0	222.5	252.7	413.7	106.2	121.8	168.3	226.4
Bangladesh	Bhutan	0.0	0.2	0.3	0.4	0.0	7.4	3.6	4.8
	India	20.2	21.7	35.8	55.0	64.0	170.3	994.1	1178.8
	Nepal	0.2	7.4	10.0	17.8	11.8	1.5	3.9	14.3
	Pakistan	42.3	23.2	26.5	28.8	46.5	70.1	137.7	73.4
	Maldives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	Sri Lanka	2.7	8.2	11.5	1.1	2.0	8.0	10.9	6.3
	Total	62.7	52.4	72.5	102.0	124.2	257.3	1150.2	1278.2
Sri Lanka	Bangladesh	2.7	9.8	12.0	5.7	2.4	8.9	6.0	1.2
	India	30.0	20.2	32.0	45.9	76.7	118.0	469.0	630.3
	Maldives	2.0	7.4	14.0	28.5	2.0	6.2	17.0	17.1
	Nepal	0.0	0.1	0.0	2.0	0.0	0.0	1.0	5.4
	Pakistan	55.5	32.5	43.0	31.3	17.8	50.8	52.0	104.6
	Total	90.2	70.0	101.0	113.4	98.9	183.9	545.0	758.6
Nepal	Bangladesh	10.7	0.6	3.5	9.6	0.2	15.2	11.0	5.9
	India	40.5	14.8	25.0	145.5	87.4	58.5	117.8	439.7
	Pakistan	2.0	0.7	0.5	0.8	0.1	2.1	3.3	6.2
	Maldives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Sri Lanka	0.0	0.1	0.9	4.9	0.0	2.8	0.0	2.2
	Total	53.2	16.2	29.9	160.8	87.7	78.6	132.1	454.0
Maldives	Bangladesh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
	India	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0
	Nepal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pakistan	0.3	0.0	0.0	0.1	0.2	0.7	0.7	2.0
	Sri Lanka	1.8	7.2	11.2	15.5	2.2	9.5	15.3	31.4
	Total	2.1	7.3	11.3	16.4	2.4	10.2	16.0	33.3

Source: IMF Direction of Trade Statistics.

Annex Table A3: South Asia: Profile of Dynamic Exports (1990–98)

INDIA							
Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Diamonds, unworked cut/otherwise worked (6672)	4745414	15.1	14.5	Rice, milled (0423)	540945	32.2	46.6
Cotton yarn	989322	3.2	5.1	Cotton yarn (6513)	84585	5.0	4.2
Jewelry of gold, silver or platinum (8973)	928068	3.0	5.1	Medicaments n.e.s.(5429)	51029	3.0	3.0
Rice, milled (0423)	951132	3.0	4.7	Woven cotton finish > 200g (6524)	42546	2.5	2.8
UN Special Code (9310)	746537	2.4	3.2	Other coal (3212)	32690	1.9	2.4
Crustaceans, frozen(0361)	753242	2.4	2.3	Oil-cake & other residues (0813)	35206	2.1	2.3
Jackets, blazers of textile fabrics (8424)	472904	1.5	2.2	Beans, peas, lentils & leguminous vegetables (0542)	23326	1.4	2.0
Men's/boys' shirts, woven	718939	2.3	2.2	UN Special Code (9310)	24400	1.5	1.7
Organic chemicals, n.e.s.	349150	1.1	2.2	Motorcycles, auto-cycles and cycles (7851)	27048	1.6	1.4
Curtains etc. n.e.s. (6585)	509245	1.6	2.1	Portland cement,slag cement etc.(6612)	25681	1.5	1.3
T-shirts/singlets knit/c (8454)	339698	1.1	2.0	Synthetic organic dyestuffs (5311)	22144	1.3	1.3
Women's/girls' blouse woven (8427)	712770	2.3	1.5	Chassis fitted with engines for MV(7841)	25690	1.5	1.1
Coffee, whether or not roasted (0711)	330891	1.1	1.4	Woven cotton finish < 200g (6523)	18870	1.1	1.0
Non-magnetic recorded media (8987)	203189	0.6	1.3	Organic chemicals, n.e.s.	13444	0.8	1.0
Special purpose cases (8319)	180632	0.6	1.2	Yarn of regenerated fibers (6518)	11513	0.7	1.0
Insecticides packed for sale etc. (5911)	191245	0.6	1.2	Food wastes and prepared animal feeds (0819)	11197	0.7	1.0
Other materials of vegetable origin (2929)	207115	0.7	1.0	Cotton fabrics, woven, bleached, dyed, printed (6522)	31527	1.9	0.8
Synthetic organic dyestuffs (5311)	310118	1.0	1.0	Tyres, pneumatic, used on buses, lorries (6252)	19465	1.2	0.8
Building & monumental stone, worked (6613)	181626	0.6	1.0				
Edible nuts (0577)	404608	1.3	1.0				
Men's/boys' trousers etc. woven (8414)	168868	0.5	1.0				
Footwear leather upr n.e.s. (8514)	296199	0.9	0.9				
Men's/boys' knitted/crocheted shirts (8437)	335441	1.1	0.9				
Oil-cake & other residues (0813)	425403	1.4	0.9				
Carpets, rugs of textile materials (6596)	136162	0.4	0.9				
Woven cotton finish > 200g (6524)	160951	0.5	0.8				
Other made-up articles of textile (6589)	177139	0.6	0.8				
Insulin medicaments bulk (5421)	146725	0.5	0.8				
Women's/girls' skirts woven (8425)	224274	0.7	0.8				
Antibiotics n.e.s. not incl. in 541.7 (5413)	127444	0.4	0.7				
Castor oil (4225)	142549	0.5	0.7				
Yarn of regenerated fibers (6518)	131482	0.4	0.7				
Pepper, pimento (0751)	167489	0.5	0.7				
Medicaments n.e.s. (5429)	454180	1.4	0.7				
Passenger motor vehicles excluding buses (7812)	125382	0.4	0.7				
Articles commonly used for domestic purposes (6974)	135713	0.4	0.7				
Fish, frozen (excluding fillets)	137137	0.4	0.7				
Other precious & semi-precious stones (6673)	201244	0.6	0.6				

Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Women's/girls' underwear/nightwear woven (8428)	108057	0.3	0.6				
Tobacco, not stripped (1211)	107119	0.3	0.6				
Fabrics, woven of continuous materials (6531)	165312	0.5	0.6				
Women's/girls' trousers woven (8426)	175955	0.6	0.6				
Motor vehicles parts/accessories (7843)	162457	0.5	0.6				
Articles of apparel & clothing accessories, leather (8481)	396762	1.3	0.6				
Tin plated/coated steel (6742)	109600	0.3	0.6				
Jerseys, pullovers, twinsets, cardigans (8451)	93278	0.3	0.5				
Bars & rods of iron/steel (6732)	82084	0.3	0.5				
Other electrical machinery and equipment (7788)	92109	0.3	0.5				
Women's/girls underwear/nightwear k/c (8448)	87921	0.3	0.5				
Structures & parts of iron/steel; plates (6911)	82562	0.3	0.5				

Source: UN Comtrade via WITS

Notes: Column 2 and 6 represent exports to ROW and the Region in 1998, Column 3 and 7 the share of the total exports to each group and column 4 and 8 represent the share of growth each product from total growth to respective destinations, between 1990 to 1998. .

PAKISTAN							
Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Bed linen, table linen etc. (6584)	1648699	10.0	13.6	Refined sugars of refined beet/cane (0612)	173491	42.4	65.8
Cotton fabrics, woven, bleached, dyed, printed (6522)	1454561	8.8	12.4	Potatoes, fresh or chilled, excluding sweet potatoes (0541)	12042	2.9	4.6
Rice semi-milled or wholly milled (0422)	1123210	6.8	9.3	Cotton fabrics, woven, unbleached (6521)	17177	4.2	3.6
Fabrics, woven of continuous textile materials (6531)	1100756	6.7	7.9	Rice semi-milled or wholly milled, broken rice(0422)	21506	5.2	3.4
Undergarments, knitted, in synthetic fibers (8463)	749086	4.6	7.2	Other fresh or chilled vegetables(0545)	8808	2.2	3.2
Articles of apparel & clothing accessories, leather(8481)	861488	5.2	4.8	Fruit, fresh or dried, n.e.s. (0579)	21822	5.3	2.3
Trousers, breeches etc. of textile fabrics (8423)	432572	2.6	4.3	Oil seeds and oleaginous fruit. n.e.s..(2238)	5808	1.4	1.6
Other sporting goods and amusements (8947)	513067	3.1	4.3	Medicaments (including veterinary) (5417)	5764	1.4	1.4
Cotton fabrics, woven, unbleached (6521)	854337	5.2	4.1	Fabrics, woven of synthetic materials (6531)	11554	2.8	1.3
Refined sugars other products of refined beet/cane (0612)	247719	1.5	3.5	Cotton yarn (6513)	15397	3.8	1.2
Outer garments & clothing, knitted (8459)	408056	2.5	3.2	UN Special Code (9310)	2540	0.6	1.0
Made-up articles of textile materials(6589)	353315	2.1	2.7	Cotton fabrics, woven, bleached. dyed, printed (6522)	51318	12.5	0.7
Outer garments of textile fabrics (8429)	135334	0.8	1.7	Knitted/crocheted fabrics of fibers (6552)	3111	0.8	0.6
Knitted/crocheted fabrics of non-synthetic fibers (6552)	168498	1.0	1.7	Durum wheat, unmilled (0411)	1553	0.4	0.6
Undergarments, knitted in cotton (8462)	155635	0.9	1.6	Malt extract; preparations of flour etc, for infant food (0488)	1541	0.4	0.6
Shirts, men's, of textile fabrics	274122	1.7	1.5	Articles & manufact. of carving or molding materials (8991)	1937	0.5	0.5
Yarn contain.85% by weight of synthetic fibers (6514)	116999	0.7	1.2	Plants, seeds, fruit used in perfumery (2924)	1833	0.4	0.5
Clothing accessories, knitted or crocheted (8472)	148165	0.9	1.2	Juices; fruit & vegetables unfermented (0585)	1219	0.3	0.5
Cotton yarn (6513)	2034627	12.4	1.1	Other tubes and pipes, of iron or steel (6783)	1216	0.3	0.5
Medical instruments and appliances(8720)	229334	1.4	1.1	Apples, fresh (0574)	1087	0.3	0.4
Yarn of discontinuous synthetic fibers < 85% (6516)	68738	0.4	1.0	Fish, frozen (excluding fillets)(0342)	1080	0.3	0.4
Medicaments (including veterinary) (5417)	64425	0.4	0.7	Oranges,mandarins,clementines etc. (0571)	1027	0.3	0.4
Articles & manuf. of carving or molding (8991)	89536	0.5	0.7	Molasses, whether or not decolorized (0615)	1155	0.3	0.4
Wadding textile fabrics (6577)	84118	0.5	0.5	Spices (except pepper and pimento)(0752)	1241	0.3	0.3
Tarpaulins, sails, awnings, sunblinds etc.	104479	0.6	0.5	Elect. app.(switches, relays, fuses, plugs etc.) (7721)	803	0.2	0.3
Footwear (8510)	71615	0.4	0.4	Tarpaulins, sails, awnings, sunblinds etc.(6582)	981	0.2	0.3
Other outer garments of textile fabrics	176585	1.1	0.4	Medical instruments and appliances (8720)	849	0.2	0.3
Fruit, fresh or dried, n.e.s. (0579)	82213	0.5	0.4	Machinery & appliances for specialized industries (7284)	970	0.2	0.2
Fish, frozen (excluding fillets)	33359	0.2	0.3	Tulle, lace, embroidery, ribbons etc. (6560)	606	0.1	0.2
Molasses (0615)	104340	0.6	0.3	Sugar, confectionery & preparations (0620)	639	0.2	0.2
Suits & costumes of textile fabrics (8432)	57622	0.4	0.3	Miscellaneous articles of materials of div. 58 (8939)	586	0.1	0.2
Cutlery	36524	0.2	0.3	Edible products and preparations n.e.s. (0980)	553	0.1	0.2
Animal/vegetable oils & fats, hydrogenated (4312)	17402	0.5	0.2	Bed linen, table linen, kitchen linen etc. (6584)	1274	0.3	0.2
Clothing accessories of textile fabrics	84306	0.5	0.2	Pharmaceutical goods (5419)	809	0.2	0.2
Sacks and bags of textile materials (6581)	48950	0.3	0.2	Other outer garments of textile fabrics (8429)	378	0.1	0.1
Miscellaneous articles of materials of div. 58 (8939)	20570	0.1	0.2	Pebbles and crushed or broken stone (2734)	444	0.1	0.1
Traveling rugs and blankets (6583)	15708	0.1	0.2	Electric insulating equipment (7732)	350	0.1	0.1
Edible products and preparations, n.e.s.	15520	0.1	0.2	Building and monumental stone unworked (2731)	415	0.1	0.1

Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Other fresh or chilled vegetables	19152	0.1	0.2	Other parts & accessories of motor vehicles(7849)	556	0.1	0.1
Crustaceans and mollusks, frozen etc. (0360)	167416	1.0	0.2	Pens, pencils and fountain pens	304	0.1	0.1
Shellac, seed lac, stick lac, resins, gum-resins etc. (2922)	65450	0.4	0.2	Gauze, cloth, grill of iron steel or copper (6935)	279	0.1	0.1
Wheeled tractors, not incl. in 744.11(7224)	11909	0.1	0.2	Other electric power machinery, parts (7712)	331	0.1	0.1
Potatoes, fresh or chilled (0541)	13921	0.1	0.2	Fish fillets, frozen (0344)	254	0.1	0.1
Fish fillets, frozen (0344)	19569	0.1	0.1	Wheeled tractors, not incl. in 744.11/783.2-(7224)	270	0.1	0.1
Suits, men's, of textile fabrics (8422)	44215	0.3	0.1	Blooms, billets, slabs & sheets of iron or steel (6725)	235	0.1	0.1
Oranges, mandarins, clementines etc. (0571)	14302	0.1	0.1	Crustaceans and mollusks, fresh, frozen etc.(0360)	406	0.1	0.1
Candles, matches, pyrophoric alloys etc. (8993)	16490	0.1	0.1	Other furniture and parts(8219)	202	0.0	0.1
Juices; fruit & vegetable, unfermented (0585)	10803	0.1	0.1	Macaroni, spaghetti and similar products(0483)	198	0.0	0.1
Old clothing and other old textile articles (2690)	12790	0.1	0.1	Other sugars; sugar syrups; artificial honey (0619)	231	0.1	0.1
Jewelry of gold, silver or platinum (8973)	14709	0.1	0.1	Varnishes and lacquers; distempers, water (5334)	172	0.0	0.1

Source: UN Comtrade via WITS

Notes: Column 2 and 6 represent exports to ROW and the Region in 1998, Column 3 and 7 the share of the total exports to each group and column 4 and 8 represent the share of growth each product from total growth to respective destinations, between 1990 to 1998.

BANGLADESH							
Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Men's/boys shirts, woven (8415)	899130	17.9	21.3	Jute & other textile based fibers, n.e.s. (2640)	20977	46.6	33.8
Jerseys/pullovers etc. (8453)	394212	7.9	11.4	Other inorganic bases & metallic oxides, hydroxides.(5225)		10.1	33.7
T-shirts/singlets knit/c (8454)	377689	7.5	10.8	Tea (0741)	9770	21.7	7.0
Men's/boys' jackets/blazer woven (8413)	376115	7.5	10.3	Lifting, handling, loading machines, conveyors (7442)	585	1.3	4.3
Men's/boys' trouser etc. woven (8414)	411904	8.2	10.3	Crustaceans and molluscs, fresh, chilled etc.(0360)		1.1	3.8
Men's/boys' coats, woven(8411)	332233	6.6	7.5	Vegetable material used primarily for plaiting (2923)	366	0.8	2.6
Women's/girls blouse woven(8427)	172584	3.4	3.6	Sheets & plates, rolled (of less than 3mm) (6746)		0.6	2.1
Women/girls' trousers woven(8426)	148928	3.0	3.6	Other artificial plastic materials, n.e.s. (5852)		0.4	1.5
Crustaceans, frozen(0361)	257502	5.1	3.2	Casks, drums, boxes of iron/steel for packing (6924)	171	0.4	1.1
Trousers, breeches etc. of textile fabrics (8423)	110937	2.2	2.8	Fabrics, woven, of synthetic fibers (6534)		0.3	1.0
Overcoats and other coats, men's (8421)	105758	2.1	2.3	Cotton yarn (6513)		0.3	1.0
Suits & costumes of textile fabrics (8432)	45566	0.9	1.4	Fabrics, woven, of jute or textile based fiber (6545)	209	0.5	0.7
Cotton fabrics, woven, unbleached, not mercerized(6521)	49231	1.0	1.3	Articles & manufactures of carving or molding materials(8991)		0.2	0.7
Women's/girls' underwear/nightwear woven (8428)	46164	0.9	1.3	Jackets, blazers of textile fabrics (8424)		0.2	0.6
Tarpaulins, sails, awnings, sunblinds tents etc.(6582)	41186	0.8	1.2	Fuel oils, n.e.s. (3344)	130	0.3	0.6
Twine, cordage, ropes & cables & manufacture thereof (65750)	49887	1.0	1.2	Electrical motors & generators, generating sets (7162)	71	0.2	0.5
Jerseys, pullovers, twinsets, cardigans knitted (8451)	38744	0.8	1.1	Under garments, knitted in cotton (8462)		0.2	0.5
Men/boy knitted/crocheted shirts (8437)	41771	0.8	0.9	Shirts, men's, of textile fabrics (8441)	82	0.2	0.5
Fabrics, woven, of discontinuous synthetic fibers (6534)	29686	0.6	0.9	Blouses of textile fabrics (8435)		0.1	0.4
Men's/boys; underwear/nightwear, woven (8416)	35437	0.7	0.9	Soap; organic products & preparations (5541)		0.1	0.3
Swimwear(8456)	28901	0.6	0.8	Fish, frozen (excluding fillets)	46	0.1	0.3
Mineral or chemical fertilizers, nitrogenous (5621)	32920	0.7	0.7	Miscellaneous articles of materials of div. (8939)	70	0.2	0.3
Under garments, excl. shirts, of textile fabrics (8442)	42488	0.8	0.6	Refractory bricks & other refractory construction (6623)		0.1	0.3
Yarn of text. fibers, incl. yarn of glass fiber (6519)	58950	1.2	0.5	Coats and jackets of textile fabrics (8431)		0.1	0.3
Sacks and bags, of textile materials (6581)	89894	1.8		Auxiliary machinery for headings 724.51/52/53/61(7246)	45	0.1	0.2
Jute/based fiber, raw/rett. (2641)	61652	1.2		Other outer garments & clothing, knitted (8459)		0.1	0.2
Leather of other bovine cattle and leather (6114)	82080	1.6		Small-wares and toilet articles, dusters etc.(8998)		0.1	0.2
Fabrics, woven, of jute & other textile based. fiber (6545)	72116	1.4		Edible products and preparations, n.e.s. (0980)	45	0.1	0.2
				Agricultural & horticultural machinery for soil preparation (7211)		0.1	0.2

Source: UN Comtrade via WITS

Notes: Column 2 and 6 represent exports to ROW and the Region in 1998, Column 3 and 7 the share of the total exports to each group and column 4 and 8 represent the share of growth each product from total growth to respective destinations, between 1990 to 1998.

SRI LANKA							
Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Tea (0741)	1213323	14.0	4.5	Knitted/crocheted fabrics of fibers (6552)	9646	7.6	12.0
Other outer garments of textile fabrics (8439)	610120	7.0	9.0	Pepper; pimento(0751)	10377	8.2	11.6
Under garments, knitted in cotton (8462)	556127	6.4	9.4	Copra (2231)	8855	7.0	7.4
Blouses of textile fabrics (8435)	420206	4.8	4.9	Tulle, lace, embroidery, ribbons,& wares (6560)	4855	3.9	6.0
Trousers, breeches etc. of textile fabrics (8423)	351763	4.1	4.2	Edible nuts (0577)	8391	6.7	5.3
Other outer garments & clothing, knitted(8459)	349862	4.0	4.5	Spices (except pepper and pimento) (0752)	5052	4.0	5.0
Shirts, men's, of textile fabrics (8441)	301305	3.5	3.4	Fruit, fresh or dried, n.e.s. (0579)	4434	3.5	5.0
Travel goods, handbags, briefcases etc. (8310)	246126	2.8	4.6	Cotton fabrics, woven, bleached, dyed, printed (6522)	4320	3.4	4.8
Jerseys, pullovers, twinsets, cardigans (8451)	223113	2.6	3.2	Warships of all kinds (7931)	3081	2.4	3.8
Dresses, women's, of textile fabrics (8433)	198962	2.3	2.8	Articles of apparel & clothing accessories of plastic (84820	2927	2.3	3.7
Jackets, blazers of textile fabrics (8424)	192930	2.2	2.2	Waste paper, paperboard; for paper-making (2511)	2709	2.1	3.3
Parts of and accessories suitable for (7599)	175139	2.0	3.2	Acyclic alcohols & their derivatives (5121)	2570	2.0	2.7
Corsets, brassieres, suspenders etc. (8465)	170894	2.0	3.0	Yarn containing 85% by weight of synthetic fibers (6514)	1638	1.3	2.0
Skirts, women's, of textile fabrics (8434)	160455	1.9	2.3	Tugs, special purpose vessels, floating structures (7938)	1445	1.1	1.8
Edible nuts (excluding those extracted of oil) (0577)	159539	1.8	1.3	Other fresh or chilled vegetables (0545)	2271	1.8	1.7
Coats and jackets of textile fabrics(8431)	155015	1.8	1.2	Bones, horns, hooves, claws, coral, shells etc. (2911)	1308	1.0	1.4
Other tyres, tyre cases, inner tubes (6259)	137954	1.6	2.0	Printed matter, n.e.s. (8928)	1104	0.9	1.3
Undergarments, women's, of textile fabrics (8443)	137110	1.6	2.1	Fabrics, woven of synthetic textile materials (6531)	858	0.7	1.1
Footwear (8510)	133707	1.5	2.1	Clothing accessories of textile fabrics (8471)	730	0.6	0.9
Clothing accessories, knitted or crocheted (8472)	130340	1.5	1.7	Cotton fabrics, woven, unbleached (6521)	667	0.5	0.8
Articles of apparel & clothing of plastic (8482)	120406	1.4	1.9	Non-refractory ceramic bricks, tiles, pipes (6624)	884	0.7	0.7
Spices (except pepper and pimento) (0752)	117757	1.4	0.9	Miscellaneous articles of base metal (6996)	497	0.4	0.6
Undergarments, knitted, of synthetic fibers (8463)	111254	1.3	0.7				
Tarpaulins, sails, awnings, sunblinds etc.(6582)	106302	1.2	1.8				
Children's toys, indoor games etc. (8942)	81259	0.9	1.5				
Crustaceans and molluscs, fresh, frozen (0360)	81134	0.9	0.8				
Other outer garments of textile fabrics (8429)	77784	0.9	0.8				
Dresses, skirts, suits etc, knitted or crocheted (8452)	70880	0.8	0.8				
Vegetable textile fibers, n.e.s. and waste (2659)	66171	0.8	0.6				
Tableware etc. of porcelain or china (6664)	50358	0.6	0.7				
Headgear and fittings thereof, n.e.s.(8484)	47894	0.6	0.9				
Fish, fresh (live/dead) or chilled, excl. fillets (0341)	43815	0.5	0.7				
Other articles of rubber, n.e.s. (62890)	40140	0.5	0.5				
Suits & costumes of textile fabrics (8432)	39253	0.5	0.5				
Basketwork, wickerwork etc. (8997)	37308	0.4	0.4				
Articles for the conveyance or packing of goods (8931)	36038	0.4	0.4				
Overcoats and other coats, men's (8421)	33992	0.4	0.3				
Other electric power machinery, parts of (7712)	31652	0.4	0.6				
Cotton fabrics, woven, bleach. dyed, printed (6522)	31458	0.4	0.6				

Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Bed linen, table linen, toilet & kitchen linen (6584)	30987	0.4	0.4				
Cotton fabrics, woven, unbleached (6521)	30633	0.4	0.6				
Undergarments, excluding shirts of textile fabrics (8442)	29750	0.3	0.5				
Pepper; pimento (0751)	27140	0.3	0.4				
Statuettes & other ornaments & articles (6666)	26157	0.3	0.4				
Transformers, electrical (7771)	22495	0.3	0.4				
Printed circuits and parts thereof (7722)	21900	0.3	0.4				
Non-synthetic knitted/crocheted fabrics (6552)	21818	0.3	0.3				
Sacks and bags of textile materials (6581)	21006	0.2	0.4				
Other non-electrical mach. amp. parts(7452)	19093	0.2	0.4				
Fabrics, woven containing 85% synthetic fibers (6532)	17385	0.2	0.3				

Source: UN Comtrade via WITS

Notes: Column 2 and 6 represent exports to ROW and the Region in 1998, Column 3 and 7 the share of the total exports to each group and column 4 and 8 represent the share of growth each product from total growth to respective destinations, between 1990 to 1998.

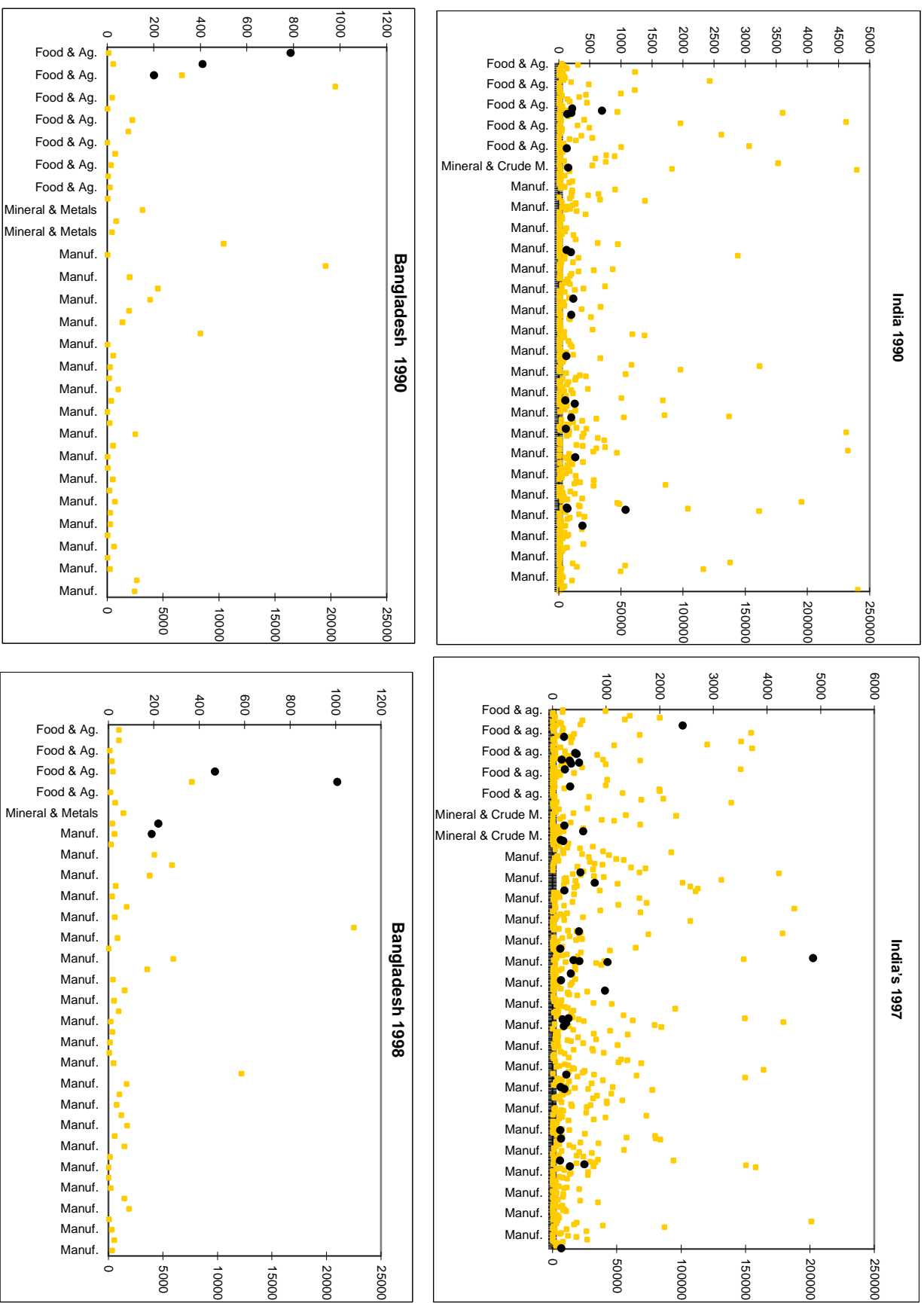
NEPAL							
Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Carpeting and rugs, knotted (6592)	257858	48.6	69.9	Beans, peas, lentils & other vegetables (0542)	12486	85.7	82.7
Garments of textile fabrics (8439)	39643	7.5	6.8	Rice, milled(0423)	1603	11.0	13.9
UN Special Code (9310)	18443	3.5	5.0	Other wheat and meslin, unmilled (0412)	134	0.9	1.2
Trousers,breeches etc. (8423)	28797	5.4	3.9	UN Special Code (9310)	82	0.6	0.7
Bed table, toilet & kitchen linen (6584)	8129	1.5	2.2	Building and monumental stone unworked (2731)	59	0.4	0.5
Blouses of textile fabrics (8435)	15600	2.9	2.1	Copper wire (6824)	27	0.2	0.2
Undergarments, knitted in cotton (8462)	6675	1.3	1.8	Auxiliary plant for use with boilers (7112)	23	0.2	0.2
Ornamental objects of mat. of div.58 (8933)	6430	1.2	1.7	Macaroni, spaghetti and similar products	24	0.2	0.2
Jewelry of gold, silver or platinum (8973)	4820	0.9	1.3	Oral hygiene preparation (5534)	12	0.1	0.1
Oil seeds and oleaginous fruit (2238)	3963	0.7	1.1	Beer made from malt (including ale, stout) (1123)	11	0.1	0.1
Other outer garments & clothing, knitted (8459)	2932	0.6	0.8	Copper tube/pipe/fitting (6827)	10	0.1	0.1
Beans,peas,lentils & vegetables (0542)	13842	2.6	0.7	Yarn contain.85% by weight of synthetic fibers (6514)	8	0.1	0.1
Articles of paper pulp, paper, paperboard, cellulose (6428)	2316	0.4	0.6	Optical appliances, n.e.s.	6	0.0	0.0
Jerseys, pullovers, twinsets, cardigans (8451)	3371	0.6	0.6	Bulbs, tubers & rhizomes of flowering etc.(2926)	7	0.0	0.0
Jackets, blazers of textile fabrics (8424)	1417	0.3	0.3	Animal leather n.e.s.	2	0.0	0.0
Clothing accessories of textile fabrics (8471)	1252	0.2	0.3	Animal/vegetable oils & fats,(hydrogenated) (4312)	1	0.0	0.0
Travel goods, handbags, purses, sheaths (8310)	1349	0.3	0.3	Original sculpture etc.	1	0.0	0.0
Leather apparel & clothing accessories (8481)	677	0.1	0.2	Live animals used for food (0019)	1		0.0
Manufactured articles of wood, n.e.s. (6359)	409	0.1	0.1	Bakery products (e.g. bread, biscuits) etc..(0484)	1	0.0	0.0
Clothing accessories, knitted or crocheted (8472)	258	0.0	0.1	Gypsum, plasters, limestone stone etc. (2732)	0		0.0
Tea (0741)	356	0.1	0.1	Paper products n.e.s. (6429)	0		0.0
Toilet articles, feather dusters (8998)	254	0.0	0.1	Men's/boys' coats, woven	0		0.0
Natural honey(0616)	140	0.0	0.0	Cotton seeds (2223)	0		0.0
Fabrics, woven, of silk, of noil or waste silk (6541)	95	0.0	0.0	Jute/based fibre, raw/rett (2641)	0		0.0
Beer made from malt (1123)	74	0.0	0.0	Trunks/suitcases/etc. (8312)	0		0.0
Cotton fabrics, woven, bleached, dyed, printed (6522)	46	0.0	0.0				
Armored vehicles, arms of war & ammunition (9510)	38	0.0	0.0				
Manufactures of wood use (6354)	33	0.0	0.0				
Bulbs, tubers & rhizomes of flowering etc. (2926)	31	0.0	0.0				
Macaroni, spaghetti and similar products (0483)	24	0.0	0.0				
Coffee, whether or not roasted (0711)	10	0.0	0.0				
Vegetables, prepared or preserved, n.e.s. (0565)	6	0.0	0.0				
Medicaments (including veterinary) (5417)	57	0.0	0.0				
Gramophone records and thereof (8983)	5	0.0	0.0				
Food wastes and animal feeds, n.e.s. (0819)	1	0.0					
Shellac, seed lac, stick lac, resins, gum-resins (2922)	1	0.0					
Vegetable products, roots & tubers (0548)	7	0.0					
Tarpaulins, sails, sunblinds, tents etc. (6582)	1	0.0					
Cotton seeds (2223)	0	0.0					

Product Description	Exports to the ROW (\$ '000)	Share in Total Exports	Share of Growth	Product Description	Intra-regional Exports	Share of Intra-regional Exports	Share of Growth
Spirits; liqueurs, other spirits, n.e.s. (1124)	1	0.0					
Building & monumental stone, worked (6613)	1	0.0					
Printed matter, n.e.s..(8928)	4	0.0					
Seeds, fruit & spores (kind used for sowing) (2925)	28	0.0					
Pianos and string musical instruments (8981)	0	0.0					
Children's toys, indoor games etc. (8942)	0	0.0					
Wood and resin-based chemical products (5981)	0	0.0					
Other fresh or chilled vegetables (0545)	17	0.0					
Miscellaneous articles of materials (8939)	1	0.0					
Footwear (8510)	7	0.0					

Source: UN Comtrade via WITS

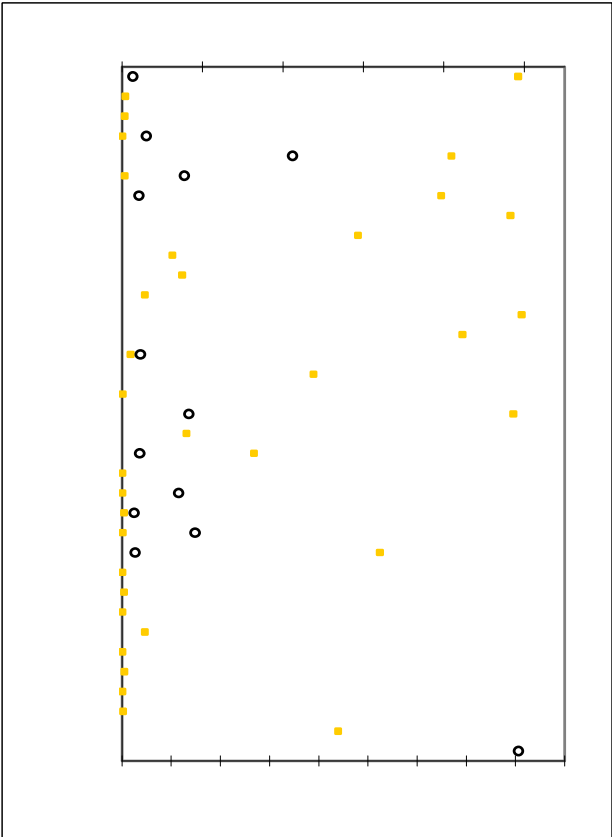
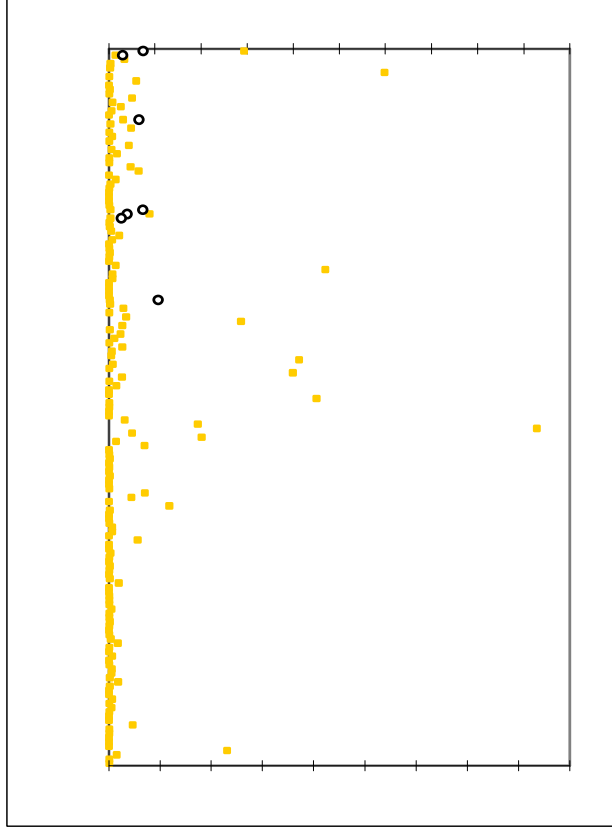
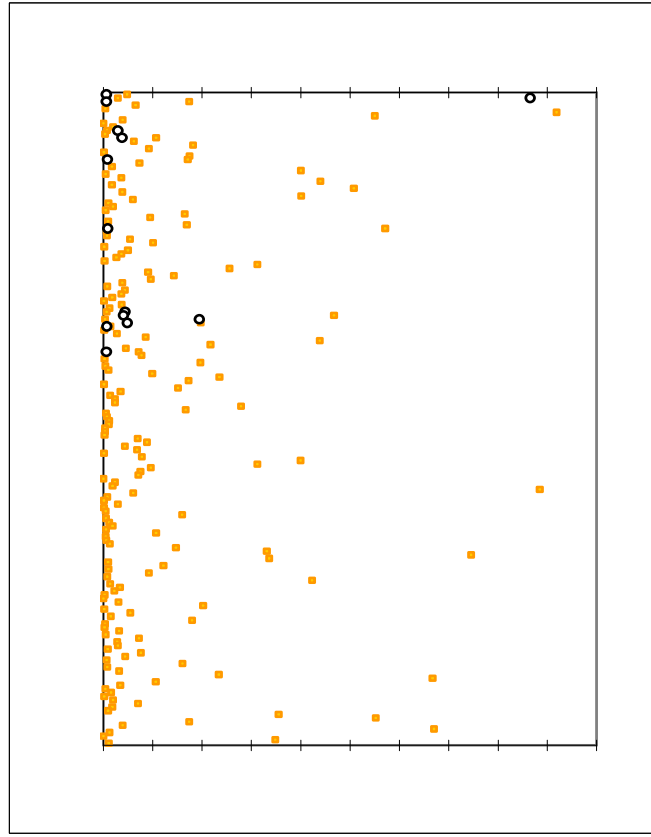
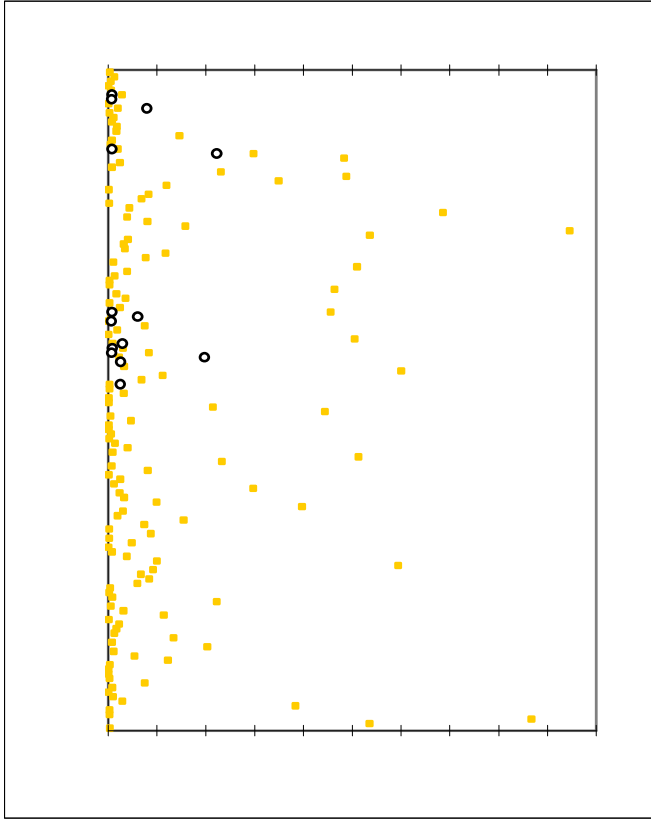
Notes: Column 2 and 6 represent exports to ROW and the Region in 1998, Column 3 and 7 the share of the total exports to each group and column 4 and 8 represent the share of growth each product from total growth to respective destinations, between 1990 to 1998.

Annex Figure A1: South Asia: Changing Distribution of Regional Exports (1990 & 1998)



Source: WITS Database, World Bank

Note: Scatter plots are observations of exports at SITC 4-digit level. Bold plots represent the values of the right vertical scale.



Annex Table A4:
Competition between South Asian Countries: Observation of Similarity among Major Exports
(1998)

INDIA					
Product Description	SITC	Exports to the ROW (\$ '000)	Share in Exports¹	RCA	Similarity count²
Diamonds, unworked cut/otherwise worked, not mounted/set	6672	4745414	15.1	23.9	2
Cotton yarn	6513	989322	3.2	23.3	2
Rice, milled	0423	951132	3.0	20.2	
Jewelry of gold, silver or platinum	8973	928068	3.0	7.9	2
Crustaceans, frozen	0361	753242	2.4	13.6	
UN Special Code	9310	746537	2.4	0.8	4
Men's/boys' shirts, woven	8415	718939	2.3	12.8	
Women's/girls' blouse woven	8427	712770	2.3	17.4	
Curtains etc n.e.s.	6585	509245	1.6	34.5	
Jackets, blazers of textile fabrics	8424	472904	1.5	21.5	5
Medicaments n.e.s.	5429	454180	1.4	1.4	
Oil-cake & other residues (except dregs)	0813	425403	1.4	8.0	
Edible nuts (excl. nuts used for the extraction of oil)	0577	404608	1.3	16.5	2
Articles of apparel & clothing accessories, of leather	8481	396762	1.3	13.0	3
Organic chemicals, n.e.s.	5169	349150	1.1	19.1	
T-shirts/singlets knit/c	8454	339698	1.1	4.5	
Men's/boys' knitted/crocheted shirts	8437	335441	1.1	12.7	
Coffee, whether or not roasted or freed of caffeine	0711	330891	1.1	5.6	2
Synthetic organic dyestuffs	5311	310118	1.0	5.5	
Footwear leather upr, n.e.s.	8514	296199	0.9	2.4	
Womens/girl skirts woven	8425	224274	0.7	11.7	
Other materials of vegetable origin, n.e.s.	2929	207115	0.7	15.3	
Non-magnetic recorded media	8987	203189	0.6	2.1	
Other precious & semi-precious stones, unworked, cut etc.	6673	201244	0.6	22.4	2
Insecticides packed for sale etc.	5911	191245	0.6	10.1	
Building & monumental stone, worked,& articles thereof	6613	181626	0.6	5.8	
Special purpose cases	8319	180632	0.6	7.8	
Other made-up articles of textile materials, n.e.s..	6589	177139	0.6	9.9	2
Women's/girls' trousers woven	8426	175955	0.6	2.7	
Men's/boys' trousers etc. woven	8414	168868	0.5	1.8	
Pepper ; pimento	0751	167489	0.5	21.5	2
Fabrics, woven of continuous synthetic textile materials	6531	165312	0.5	1.8	2
Motor vehicle parts/accessories n.e.s.	7843	162457	0.5	0.2	
Woven cotton finish > 200g	6524	160951	0.5	4.1	
Insulin medicaments bulk	5421	146725	0.5	2.9	
Castor oil	4225	142549	0.5	119.3	
Fish, frozen (excluding fillets)	0342	137137	0.4	3.2	3
Carpets, rugs etc. of other textile materials n.e.s.	6596	136162	0.4	19.9	
Articles commonly used for domestic purposes, pot scourers	6974	135713	0.4	4.3	
Yarn of regenerated fibers, put up for retail sale	6518	131482	0.4	4.0	
Antibiotics n.e.s. not incl. in 541.7	5413	127444	0.4	3.0	
Passenger motor vehicles excluding buses	7812	125382	0.4	0.1	
Tin plated/coated steel	6742	109600	0.3	4.7	
Women's/girls' underwear/nightwear, woven	8428	108057	0.3	7.9	
Tobacco, not stripped	1211	107119	0.3	9.8	2
Jerseys, pullovers, twinsets, cardigans, knitted	8451	93278	0.3	4.2	4
Other electrical machinery and equipment	7788	92109	0.3	0.9	
Women's/girls' underwear/nightwear k/c	8448	87921	0.3	2.6	
Structures & parts of structures; iron/steel; plates	6911	82562	0.3	1.2	
Bars & rods, of iron/steel; hollow mining drill steel	6732	82084	0.3	0.7	

Source: WITS Database, World Bank

Notes: ¹ Percentage share of product in total exports (1998), ² Number of South Asian countries exporting the product to ROW with RCA>1

PAKISTAN					
Product Description	SITC	Exports to the ROW (\$ '000)	Share in Exports ¹	RCA	Similarity count ²
Cotton yarn	6513	2034627	13.0	183.7	2
Bed linen, table linen, toilet & kitchen linen etc.	6584	1648699	10.6	136.1	4
Cotton fabrics, woven, bleach.mergerized, dyed, printed	6522	1454561	9.3	55.2	4
Rice semi-milled or wholly milled, broken rice	0422	1123210	7.2	93.5	
Fabrics, woven of continuous synthetic textile materials	6531	1100756	7.0	47.5	2
Articles of apparel & clothing accessories, of leather	8481	861488	5.5	103.0	3
Cotton fabrics, woven, unbleached, not mergerized	6521	854337	5.5	139.0	2
Under garments, knitted,of synthetic fibers	8463	749086	4.8	105.5	3
Other sporting goods and fairground amusements	8947	513067	3.3	35.1	2
Trousers, breeches etc. of textile fabrics	8423	432572	2.8	18.2	4
Carpets, carpeting and rugs, knotted	6592	408703	2.6	206.0	2
Other outer garments & clothing, knitted	8459	408056	2.6	14.6	4
Other made-up articles of textile materials, n.e.s.	6589	353315	2.3	52.5	2
Shirts, men's, of textile fabrics	8441	274122	1.8	14.8	3
Refined sugars and other products of refined beet/cane	0612	247719	1.6	25.0	
Medical instruments and appliances	8720	229334	1.5	6.6	
Leather of other hides or skins	6116	189679	1.2	90.1	2
Other outer garments of textile fabrics	8439	176585	1.1	5.4	4
Knitted/crocheted fabrics of fibers other than synthetic	6552	168498	1.1	8.0	
Crustaceans and mollusks, fresh, chilled, frozen etc.	0360	167416	1.1	7.7	3
Under garments, knitted in cotton	8462	155635	1.0	4.8	4
Clothing accessories, knitted or crocheted, n.e.s..	8472	148165	0.9	25.9	3
Other outer garments of textile fabrics	8429	135334	0.9	11.0	3
Yarn containing 85% by weight of synthetic fibers not for sale	6514	116999	0.7	5.3	
Tarpaulins, sails, awnings, sunblinds, tents etc.	6582	104479	0.7	63.3	3
Molasses, whether or not decolorized	0615	104340	0.7	173.1	
Calf leather	6113	90157	0.6	59.7	
Articles & manufacture of carving or molding materials	8991	89536	0.6	86.9	
Cotton (other than linters),not carded or combed	2631	88178	0.6	10.9	
Clothing accessories of textile fabrics	8471	84306	0.5	11.9	2
Wadding, textile fabrics for use in machinery/plant	6577	84118	0.5	16.5	
Leather of other bovine cattle and equine leather	6114	83438	0.5	5.3	2
Fruit, fresh or dried, n.e.s.	0579	82213	0.5	6.3	
Under garments, excluding shirts, of textile fabrics	8442	75051	0.5	42.4	3
Footwear	8510	71615	0.5	1.3	3
Yarn of discontinuous synthetic fibers, containing < 85%	6516	68738	0.4	12.0	
Cotton waste (including pulled or garnetted rags)	2633	68330	0.4	135.1	
Shellac, seed lac, stick lac, resins, gum-resins etc.	2922	65450	0.4	121.9	
Medicaments(including veterinary medicaments)	5417	64425	0.4	0.6	2
Suits & costumes, women's, of textile fabrics	8432	57622	0.4	32.2	3
Dresses, skirts, suits etc, knitted or crocheted	8452	54717	0.4	12.2	3
Jackets, blazers of textile fabrics	8424	51655	0.3	7.8	5
Sacks and bags, of textile materials	6581	48950	0.3	24.6	2
Blouses of textile fabrics	8435	44655	0.3	4.3	4
Suits, men's, of textile fabrics	8422	44215	0.3	11.2	2
Petrol. oils & crude oils obtained from bitumin. minerals	3330	41562	0.3	0.3	
Cutlery	6960	36524	0.2	5.4	
Fish, frozen (excluding fillets)	0342	33359	0.2	2.8	3
Dresses, women's, of textile fabrics	8433	32341	0.2	5.8	3

Source: WITS Database, World Bank

Notes: ¹ Percentage share of product in total exports (1998), ² Number of South Asian countries exporting the product to ROW with RCA>1

BANGLADESH					
Product Description	SITC	Exports to the ROW (\$ '000)	Share in Exports ¹	RCA	Similarity count ²
Shirts, men's of textile fabrics	8441	1800670.635	17.9	162.0	3
Trousers,breeches etc.of textile fabrics	8423	823807.312	8.2	57.9	4
Under garments,knitted in cotton	8462	814786.106	8.1	41.7	4
Jerseys,pull-overs,twinsets,cardigans,knitted	8451	789594.072	7.8	42.7	4
Jackets,blazers of textile fabrics	8424	752309.232	7.5	189.3	5
Other outer garments of textile fabrics	8439	626723.351	6.2	32.3	4
Crustaceans and molluscs, fresh, chilled, frozen etc.	0360	520926.073	5.2	39.8	3
Other outer garments of textile fabrics	8429	403506.932	4.0	55.0	3
Overcoats and other coats, men's	8421	352670.427	3.5	197.6	2
Blouses of textile fabrics	8435	345224.473	3.4	54.9	4
Coats and jackets of textile fabrics	8431	234826.603	2.3	36.8	2
Other outer garments & clothing, knitted	8459	211251.477	2.1	12.6	4
Sacks and bags, of textile materials	6581	181030.002	1.8	151.6	2
Leather of other bovine cattle and equine leather	6114	164438.505	1.6	17.5	2
Jute & other textile based fibers, nes,raw/processed	2640	145069.52	1.4	1541.4	
Fabrics, woven, of jute or of other textile based fibers	6545	144440.307	1.4	860.6	
Cotton fabrics, woven, bleach. mercerized dyed, printed	6522	120061.618	1.2	7.6	4
Yarn of text, fibers, n.e.s., incl. yarn of glass fibers	6519	118116.578	1.2	54.4	
Twine, cordage, ropes & cables.& manufacture thereof	6575	99811.967	1.0	66.3	
Other sporting goods and fairground amusements	8947	88782.65	0.9	10.1	2
Tea	0741	85026.045	0.8	37.5	3
Under garments, knitted, of synthetic fibers	8463	84031.241	0.8	19.8	3
Tarpaulins, sails, awnings, sunblinds, tents etc.	6582	82372.618	0.8	83.3	3
Footwear	8510	76773.862	0.8	2.3	3
Under garments, excl. shirts, of textile fabrics	8442	70874.853	0.7	66.8	3
Mineral or chemical fertilizers, nitrogenous	5621	69805.084	0.7	18.9	
Fabrics, woven, of discontinuous synthetic fibers	6534	65495.024	0.7	10.4	
Suits, men's, of textile fabrics	8422	55207.7	0.5	23.2	2
Dresses, women's, of textile fabrics	8433	54125.973	0.5	16.1	3
Under garments, women's, of textile fabrics	8443	47203.505	0.5	46.7	2
Machinery & appliances for particular specialized industries	7284	40028.949	0.4	0.9	
Leather of other hides or skins	6116	36803.86	0.4	29.2	2
Articles for the conveyance or packing of goods	8931	35235.404	0.3	2.5	2
Bed linen, table linen, toilet & kitchen linen etc.	6584	32871.421	0.3	4.5	4
Fish, frozen (excluding fillets)	0342	31688.504	0.3	4.5	3
Other fresh or chilled vegetables	0545	29908.776	0.3	3.3	
Skirts, women's, of textile fabrics	8434	29387.185	0.3	10.0	2
Suits & costumes, women's, of textile fabrics	8432	28727.58	0.3	26.7	3
Wood, simply shaped, n.e.s.	6349	27712.823	0.3	135.4	
Dresses, skirts, suits etc., knitted or crocheted	8452	24885.076	0.2	9.3	3
Lighting fixtures and fittings and parts	8124	21774.716	0.2	2.2	
Vegetables, frozen or in temporary preservative	0546	19573.926	0.2	3.1	
Tableware & other articles of porcelain or china	6664	19340.267	0.2	8.6	2
Optical instruments and apparatus	8710	16336.537	0.2	1.3	
UN Special Code	9310	16219.18	0.2	0.1	4
Fish, dried, salted or in brine; smoked fish	0350	15535.818	0.2	6.2	
Pins & needles, fittings, base metal beads, etc.	6993	14964.381	0.1	10.7	
Fuel oils, n.e.s.	3344	14623.269	0.1	1.2	
Construction and mining machinery, n.e.s.	7234	12909.524	0.1	0.7	

Source: WITS Database, World Bank

Notes: ¹ Percentage share of product in total exports (1998), ² Number of South Asian countries exporting the product to ROW with RCA>1

SRI LANKA					
Product Description	SITC	Exports to the ROW (\$ '000)	Share in Exports ¹	RCA	Similarity count ²
Tea	0741	1213323	14.0	605.8	3
Other outer garments of textile fabrics	8439	610120	7.0	35.5	4
Under garments, knitted in cotton	8462	556127	6.4	32.2	4
Blouses of textile fabrics	8435	420206	4.8	75.6	4
Trousers, breeches etc. of textile fabrics	8423	351763	4.1	28.0	4
Other outer garments & clothing, knitted	8459	349862	4.0	23.6	4
Shirts, men's, of textile fabrics	8441	301305	3.5	30.7	3
Travel goods, handbags, briefcases, purses, sheaths	8310	246126	2.8	27.8	2
Jerseys, pullovers, twinsets, cardigans, knitted	8451	223113	2.6	13.7	4
Dresses, women's, of textile fabrics	8433	198962	2.3	67.0	3
Jackets, blazers of textile fabrics	8424	192930	2.2	54.9	5
Parts of and accessories suitable for 751.2-,752--	7599	175139	2.0	2.0	
Corsets, brassieres, suspenders etc.	8465	170894	2.0	50.3	
Skirts, women's, of textile fabrics	8434	160455	1.9	62.0	2
Edible nuts (excluding nuts used for the extraction of oil)	0577	159539	1.8	48.2	2
Coats and jackets of textile fabrics	8431	155015	1.8	27.5	2
Other tyres, tyre cases, inner tubes	6259	137954	1.6	33.3	
Under garments, women's, of textile fabrics	8443	137110	1.6	153.5	2
Footwear	8510	133707	1.5	4.6	3
Clothing accessories, knitted or crocheted, n.e.s.	8472	130340	1.5	43.0	3
Other precious & semi-precious stones, unworked, cut etc.	6673	121346	1.4	100.2	2
Articles of apparel & clothing accessories, of plastic	8482	120406	1.4	43.2	
Spices (except pepper and pimento)	0752	117757	1.4	150.4	
UN Special Code	9310	115642	1.3	0.9	4
Under garments, knitted, of synthetic fibres	8463	111254	1.3	29.6	3
Tarpaulins, sails, awnings, sunblinds, tents etc.	6582	106302	1.2	121.7	3
Diamonds, unworked. cut/otherwise worked not mounted/set	6672	83974	1.0	3.1	2
Children s toys, indoor games etc.	8942	81259	0.9	4.2	
Crustaceans and molluscs, fresh, chilled, frozen etc.	0360	81134	0.9	7.0	3
Other outer garments of textile fabrics	8429	77784	0.9	12.0	3
Dresses, skirts, suits etc, knitted or crocheted	8452	70880	0.8	29.9	3
Vegetable textile fibres, n.e.s. and waste	2659	66171	0.8	4100.2	
Tobacco, not stripped	1211	61523	0.7	41.9	2
Natural rubber latex; natural rubber & natural gums	2320	57878	0.7	17.8	
Tableware & other articles of porcelain or china	6664	50358	0.6	25.4	2
Headgear and fittings thereof, n.e.s.	8484	47894	0.6	26.0	
Fish, fresh (live/dead) or chilled, excluding fillets	0341	43815	0.5	8.6	
Other articles of rubber, n.e.s.	6289	40140	0.5	6.0	
Suits & costumes, women's, of textile fabrics	8432	39253	0.5	41.4	3
Basketwork, wickerwork etc. of plaiting materials	8997	37308	0.4	16.9	
Articles for the conveyance or packing of goods	8931	36038	0.4	2.9	2
Mineral tars and products of their distillation	3352	35152	0.4	14.4	
Overcoats and other coats, men's	8421	33992	0.4	21.6	2
Other electric power machinery, parts of 771--	7712	31652	0.4	1.8	
Chemical products and preparations, n.e.s.	5989	31564	0.4	1.2	
Cotton fabrics, woven, bleach. mercerized. dyed, printed	6522	31458	0.4	2.3	4
Bed linen, table linen, toilet & kitchen linen etc.	6584	30987	0.4	4.8	4
Cotton fabrics, woven, unbleached, not mercerized	6521	30633	0.4	9.4	2
Under garments, excluding shirts, of textile fabrics	8442	29750	0.3	31.7	3
Pepper; pimento	0751	27140	0.3	25.8	2

Source: WITS Database, World Bank

Notes: ¹ Percentage share of product in total exports (1998), ² Number of South Asian countries exporting the product to ROW with RCA>1

NEPAL					
Product Description	SITC	Exports to the ROW (\$ '000)	Share in Exports ¹	RCA	Similarity count ²
Carpets, carpeting and rugs, knotted	6592	257858	48.6	4026.1	2
Other outer garments of textile fabrics	8439	39643	7.5	37.9	4
Trousers, breeches etc.of textile fabrics	8423	28797	5.4	37.5	4
UN Special Code	9310	18443	3.5	2.4	4
Blouses of textile fabrics	8435	15600	2.9	46.0	4
Beans, peas, lentils & other leguminous vegetables	0542	13842	2.6	111.0	
Bed linen, table linen, toilet & kitchen linen etc.	6584	8129	1.5	20.8	4
Under garments, knitted in cotton	8462	6675	1.3	6.3	4
Ornamental articles and objects of materials of div.58	8933	6430	1.2	588.0	
Jewelry of gold, silver or platinum	8973	4820	0.9	4.8	2
Oil seeds and oleaginous fruit, n.e.s.	2238	3963	0.7	268.8	
Jerseys, pullovers, twinsets, cardigans, knitted	8451	3371	0.6	3.4	4
Other outer garments & clothing, knitted	8459	2932	0.6	3.2	4
Articles of paper pulp, paper, paperboard, cellulose, wadding	6428	2316	0.4	4.9	
Jackets, blazers of textile fabrics	8424	1417	0.3	6.6	5
Travel goods, handbags, briefcases, purses, sheaths	8310	1349	0.3	2.5	2
Clothing accessories of textile fabrics	8471	1252	0.2	5.5	2
Art. of apparel & clothing accessories, of leather	8481	677	0.1	2.5	3
Manufactured articles of wood, n.e.s.	6359	409	0.1	2.9	
Tea	0741	356	0.1	2.9	3
Clothing accessories, knitted or crocheted, n.e.s.	8472	258	0.0	1.4	3
Small-wares and toilet articles, feather dusters etc.	8998	254	0.0	1.5	
Natural honey	0616	140	0.0	5.9	
Fabrics, woven, of silk, of noil or other waste silk	6541	95	0.0	1.3	
Beer made from malt (including ale, stout and porter)	1123	74	0.0	0.3	
Medicaments (including veterinary medicaments)	5417	57	0.0	0.0	2
Cotton fabrics, woven, bleach. mercerized, dyed, printed	6522	46	0.0	0.1	4
Armored fighting vehicles, arms of war & ammunition	9510	38	0.0	0.1	
Manufactures of wood for domestic/decorative use	6354	33	0.0	0.4	
Bulbs, tubers & rhizomes of flowering or of foliage	2926	31	0.0	0.2	
Macaroni, spaghetti and similar products	0483	24	0.0	0.2	
Coffee, whether or not roasted or freed of caffeine	0711	10	0.0	0.0	2
Vegetables, prepared or preserved, n.e.s.	0565	6	0.0	0.0	
Gramophone records and similar sound recordings	8983	5	0.0	0.0	

Source: WITS Database, World Bank

Notes: ¹ Percentage share of product in total exports (1998), ² Number of South Asian countries exporting the product to ROW with RCA>1

Annex 2. Index Methodologies

Trade Intensity Index

The trade intensity index (TII) is a useful tool for evaluating whether a country, given the relative size of its own export market and the relative size of its partner's import market, exports to that partner as much as could be expected. The TII is defined as:

$$I_{ij} = (X_{ij} / X_i) / [M_j / (M_w - M_i)]$$

where I_{ij} , country i 's exports to country j , is defined as the share of country j in country i 's total exports (X_{ij} / X_i), relative to the share of j 's imports, M_j , in total world imports, net of i 's imports for the rest of the world ($M_w - M_i$). For those trading partners that have TIIs greater than unity, their trade relationship can be defined as “intensive” (i.e. the countries trade more than would be expected given the relative size of the market for imports).

Index of Revealed Comparative Advantage

Revealed comparative advantage measures a country's trade specialization in a commodity group and is defined as a country's sectoral share divided by the world sectoral share. $IRCA_{ij}$ equals the index of revealed comparative advantage of country i in commodity j :

$$IRCA_{ij} = \frac{X_{ij} / X_i}{X_{wj} / X_w}$$

where X_{ij} represents country i 's export of commodity j , X_{wj} represents world exports of commodity j , X_i represents the total exports of country i , and X_w represents total world exports. The index value ranges between zero and infinity with values greater than unity indicating specialization in that commodity group, while a value between zero and unity indicates no specialization in that commodity group.

Complementarity Index of Trade

The Complementarity Index measures the degree of “matching” between one country's export composition and another country's import composition. The Complementarity (C_{ij}) between country i 's exports and country j 's imports is defined as:

$$(C)ITC_{ij} = \sum_k \frac{X_{iw}^k}{X_{iw}} * \frac{M_{ww}^k - M_{iw}^k}{M_{ww}^k - M_{iw}^k} * \frac{M_{jw}^k}{M_{jw}^k}$$

where X_i and X_i^k represent country i 's exports of commodity k and total exports, respectively; M_i and M_i^k represent country i 's imports of commodity k and total imports, respectively; M_w and M_w^k represent the world's imports of commodity k and total imports, respectively; and M_j and M_j^k represent country j 's imports of commodity k and total imports, respectively. The index value ranges between zero and 100 with values greater than unity indicating complementarity between country i 's exports and country j 's imports.

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